

The ABC's of Diemaking & Diecutting

Article Title "How to Optimize Productive Output & Process Improvement in Diecutting-Converting?"

Synopsis: *How to optimize teamwork and productivity in diecutting by implementing one or more of eight different press layout options.*

The Productive Challenge

"The people who get into trouble in our company are those who carry around the anchor of the past." John Welch

The challenge of productive diecutting is to sustain competitive output levels and quality, while lowering operating cost, by solving problems, and by using newly acquired data, knowledge, or solutions, to continuously improve the system of manufacturing. Unfortunately, this is theory, and it poorly reflects the relentless reality of production pressure.



Speed and Cost are now the driving forces, *see above*, with Fast Press Changeover, and Optimal Press Speed & Yield, the battleground for success. Critical measurement, such as speed to market, response time, throughput performance, and cycle time are the some of the more realistic evaluation tools.



Within this competition against the clock, the diecutting management team has to find the time to solve problems, to learn from each experience and failure, to capture and document variance, to review and modify existing standard operating procedures, and to communicate, to train and to teach new and upgraded methods. The workforce, who often feel harried and harassed, and overwhelmed and overworked, are convinced they are going as fast as they can! Ultimately, the work team and the management team expend excess time fighting fires and each other, and are left with little or no time to consider the lessons learnt, as they race forward into the next crisis.

How do we change this unproductive situation? What do we need to do to begin to turn the tide and to make things better? There are eight recommended actions. To improve the operating structure it is important to ...

➔ Organize a standardized and continuously simplified and streamlined system of diecutting manufacturing.

➔ Organize a level knowledge, skill and experience playing field by, "Getting Everyone to Know, what Everyone Already Knows!"

➔ Organize Key Work Areas and Activities with the attention to detail and the precision of a Hospital Emergency Room. See right.



➔ Organize and implement a competitive NASCAR Pit-Crew, Benchmarked Press Changeover. See below.

➔ Organize an effective Inventory Management System to ensure everything needed to complete every task is in the right place, in the right condition, in the right amount, at the right time.

➔ Organize a system of manufacturing where Just-In-Time principles drive a focus on time management, time measurement and continuous benchmarking.



➔ Organize a system of manufacturing where communication, collaboration, and cooperation is a standard operating procedure.

➔ Organize a system of manufacturing in which productive improvement and innovation, and teamwork and teambuilding are the natural outcome of the daily operating structure.

The challenge is, to accomplish these objectives would take almost all of the available time of the management team, and it would be a constant battle as they attempt to persuade and coerce the work force into more effective methods and practices. In theory this is what is currently supposed to be happening! The reality is the managers and supervisors are fighting fires, and there is little time left over for process improvement.

Doesn't this sound familiar?

However, is there an alternative system of manufacturing, in which all of these goals and requirements would more easily flow from a more effective operating structure?





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"Many ideas grow better when transplanted into another mind than in the one where they sprung up." Oliver Wendell Holmes

What would be the goals of an alternative operating structure?

What are the Goals of Process Improvement?

"Hire the best.

Pay them fairly.

Communicate frequently.

Provide challenges and rewards.

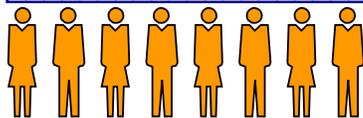
Believe in them.

Get out of their way ...

They'll knock your socks off." Mary Ann Allison



The goal of process improvement is always multi-faceted, however, an important objective in diecutting is to create a working environment in which problem solving, innovation and process improvement are the natural outcome of the way the organization functions. The management team



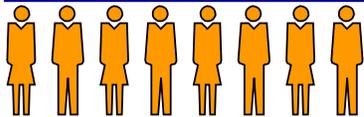
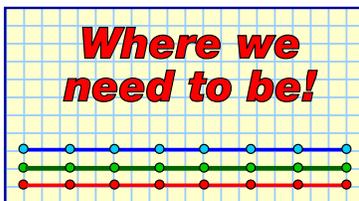
● Knowledge ● Skill ● Experience

can instigate and kick-start this initiative, however, it is ultimately non-productive and divisive to attempt to drive process improvement down the throat of any work team.

The goal of process improvement is to first create a system of work-

ing which removes barriers and obstacles to teamwork, and which seamlessly spreads knowledge, innovation and ideas. It is essential to fuel this type of change by extracting the maximum knowledge, technical data, and feedback from every production cycle. And by ensuring every team member shares and gains from each experience, even when they do not participate in the specific activity. This must be accomplished by creating an interactive environment in which education, cross training, and skill development is a by-product of every key activity.

To accomplish real change it is essential to create a system of working in which the participants and work-teams are energized and motivated to make progressive improvement, while the management team remove barriers, and unnecessary, overcomplicated, or obstructive practices.



● Knowledge ● Skill ● Experience

Diecutting-Converting is a complex process in which the entire workforce can only develop World Class Manufacturing abilities, when all of the individuals learn to act and behave as a team, and each team member accepts and takes responsibility for process improvement.

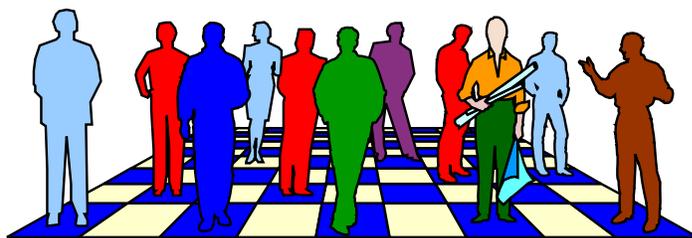
The question was, what is the goal of process improvement? And the answer is, *the primary goal of process improvement is to make it as easy as possible to be productive, to be successful, and to work as a cohesive team.*

Unfortunately, the practical reality of diecutting organization in our industry seems to reflect an inexplicable determination to undermine teambuilding, teamwork, and team based activity.

What is the Power of Teamwork in Diecutting Converting?

"The whole object of the organization is to get cooperation, to get to each individual the benefit of all of the knowledge and all of the experience of all of the individuals." Hamilton Barksdale

One of the fundamental building blocks of any type of effective manufacturing operation, is the cornerstone provided by teamwork and teambuilding. Unfortunately, in the diecutting industry, while we pay lip service to, and enthusiastically endorse the benefits of team driven activity, we are poorly organized to take advantage of a discipline, most manufacturing professionals would consider essential.



Perhaps we underestimate team work or we are not convinced of the power of organizing around a team approach to manufacturing?

How does teamwork power productive, quality diecutting manufacturing?

Every organization, every company, every department, and every discipline in the converting manufacturing operation are de facto teams, whether effective and focused, or dysfunctional and disorganized. We are pulled inexorably





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"A person who can create ideas worthy of note is a person who has learned much from others." Konosuke Matsushita

together, no matter how well or how poorly we interact. When a customer considers your organization they would be horrified if they discovered this important supplier was not the seamless interaction of cooperating professionals, you pretend to be!

An even more disturbing fact for isolationists, is your company and any type of business group consisting of people, is primarily a social organization, where personal relationships are the glue, which builds our economic security.

In practice, teamwork and team organization are neither easy nor simple, and it is important to recognize and accept the challenge of building, sustaining, and leading teams to success. However, the current situation, in which every person forms their own strategy, executes their own plan of action, and uses inconsistently applied methods and practices, is clearly the cause of our inability to manage changeover. To build a world class, efficient fast press changeover organization, we have to work well and we have to work together. But we have to be realistic.

People are not the same. They hold different and strongly held ideas and attitudes; perceptions and prejudices; comfort levels and conflict zones; and likes and dislikes; all of which impact the way they behave, the way they react to change, and the way they communicate. However, even though in the short term, teamwork can be chaotic, we have little choice in this aggressive market but to work together for our survival. How does this translate into pragmatic goals?

The goals of this project are critical to the security and prosperity of the company and every employee, and these goals should be used as regular benchmarks to assess the overall health of the project. These goals would include:

→ *Creating a faster, simpler and a more effective system of*

TEAM BUILDING ISSUES	
01:	The Team Charter (Why are we forming this team?)
02:	The Team Values (How will we work together?)
03:	The Team Mission (What are we trying to achieve?)
04:	Team Measurement (How do we measure success?)
05:	Team Management (How do we get things done?)
06:	Team Procedures (How do we plan, execute, control & evaluate?)
07:	Team Decision Making (How do select the most effective option(s)?)
08:	Team Resources (How do we get the tools to do the job?)
09:	Team Benefits (How will completion improve our status?)
10:	Team Future (What happens when the project is complete?)



converting manufacturing.

- *Reducing the cost of manufacturing and continuously lowering the resources required for each production cycle.*
- *Building and sustaining a system of working, which utilizes procedural uniformity and reinforces performance parity.*
- *Creating a more productive and personally rewarding work environment, which is easier to manage, which is stimulating to work in, and which builds the self-esteem of every participant.*
- *Building extraordinary customer loyalty, and a reputation for speed to market, for quality of products and service, and for exceptional value, which is unmatched in the industry.*
- *Creating a world class, lean, fast response, low cost, innovative converting service, which consolidates the status and the value of the organization and its work teams.*

Manufacturing has always been a continuous struggle as we are forced to adapt to crisis and to opportunity. Our reliance upon the responsibility, the prowess, and the commitment of a loose collection of individuals, to work toward poorly defined goals and theoretically shared objectives, is no longer an effective approach. The benefits of changing to a team drive system of manufacturing include the ability of teams to:



- *Make extraordinary progress when combining their talent and ability to reach a shared vision.*
- *Educate, to teach, and to rapidly develop technical competence.*
- *Simplify and to standardize a more effective and a more efficient system of converting-manufacturing.*
- *Self-manage and to take responsibility for every facet of daily working.*
- *Create a positive work environment, which promotes safety, speed, quality, and low cost manufacturing.*

This is a significant change to the way we currently work, and while the initial stages of team building and team work appear challenging and complex, if the changeover is managed in a measured step-by-step fashion, the benefits





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"What lies behind us and what lies before us are tiny matters compared to what lies within us." Ralph Waldo Emerson



of adopting this system of working are extraordinary.

The question remains, how can we create a working environment,

which fosters all the benefits of team building and teamwork we have just outlined?

What are the Disadvantages of the Current Diecutting Operating Structure?

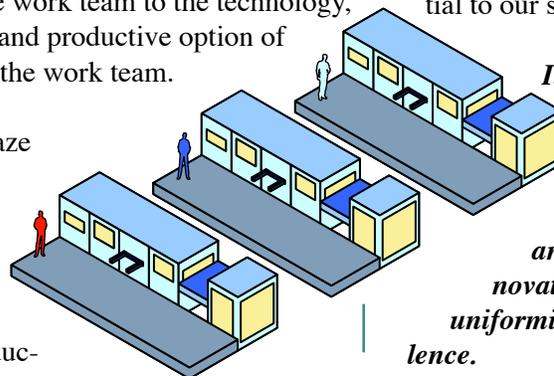
"(The best people centered managers) ... model exorbitantly high standards... They demand a lot, but show by energetic example what they demand... They delegate.... Workers are set out on their own to constantly innovate... They clear hurdles from the employees path... They're obsessive about trying things.... They motivate through inspiring vision.... They may or may not pat people on the back often... they do something much more important... They unmistakably demonstrate belief in the talent of and concern for the dignity of each worker." Tom Peters



The disadvantages with the current operating structure can be summed up in a single word. **Isolation!** This seemingly logical layout of equipment and technology, and the missing interaction between key players in the converting operation, severely undermines teamwork and teambuilding. In practice the standard layout of diecutting presses does not bring people together, but it drives them apart.

The equipment certainly looks impressive as each press is aligned and oriented in the same direction. But this is not a showroom, a monument or a museum. It is a system of manufacturing, which is completely reliant upon the team of people, who bring it to life. The traditional layout is a clumsy attempt to conform the work team to the technology, rather than the more practical and productive option of conforming the technology to the work team.

We have in effect erected a maze of walls and barriers between each team player, which makes teamwork virtually impossible. These stressful, isolated working conditions undermine any chance of produc-



tive communication, cooperation and collaboration. How does this approach build teamwork; mutual problem solving; learning and cross training; physical assistance, and technical support?

What are the key disadvantages of this type of layout in terms of building a productive work team?

- ➔ *Education, training and knowledge exchange is severely limited.*
- ➔ *Learning opportunities and knowledge are continually lost.*
- ➔ *Consultative support and practical assistance is difficult.*
- ➔ *Sharing problems, solutions and innovation is complicated.*
- ➔ *The experience focused upon any problem is limited.*
- ➔ *Problems, breakdowns, and jams take longer to resolve.*
- ➔ *Make-Ready is incremental, sequential and slow.*
- ➔ *Continuous running support is more difficult.*
- ➔ *Non productive duplication of tools, resources, and man-time.*
- ➔ *This segregated work environment is stressful.*



There are many logistical reasons for keeping the status quo, but with an average press utilization and yield of less than 50% throughout the diecutting industry, there are few sound productive reasons to oppose this type of change. We would all agree that creating a **World Class Manufacturing Organization**, built around teambuilding and teamwork, is essential to our success, and realistically, to our survival.

It is vital to create a system of manufacturing, in which the individuals and the teams are put in the most effective operating structure, which will automatically promote education and training, research and development, problem solving and innovation, performance parity and procedural uniformity, and which will drive productive excellence.



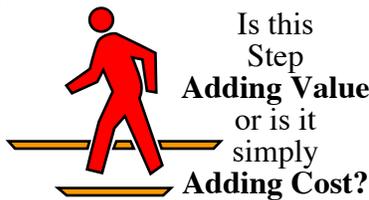


The Diecutting Operating Structure: Alternative Methods and Models?

"The technical supervisor faces an almost unique problem, how to divide his all to precious time between technical and administrative work." Estel I. Green

Tradition is a wonderful legacy for each generation to learn from and to build upon. However, the assumption is in this flow from one generation to the next, the established tradition is continually mixed with new ideas, so the best of the old is integrated with the best of the new, to create a new tradition. Unfortunately, there is often a lag time or a period where some companies hold-on to traditional ways and means too long, and they are replaced by more flexible and more rapidly adaptive organizations.

The reason we find ourselves struggling to increase speed, to lower cost and to improve consistency, is because we have ignored the most important element of manufacturing control. **Time!** Our practice is to concentrate on hours and not minutes, and certainly not seconds. How many times have you heard someone say, *"It will only take a few minutes to find the tools?"* Everything we do is measured in **Activity Time and Elapsed Time**, and seconds do count. It is because we do not really value and measure, and conserve time that we have fallen behind the productivity curve. In practice, we hold technology and equipment in higher regard than we do people, and while we concentrate on machine efficiency we generally ignore work area efficiency and people efficiency.



In developing a strategy for productively integrating teamwork and teambuilding into a more effective diecutting system of manufacturing, there are eight options to consider. These are:

- Level One: Implement Press Customization**
- Level Two: Add One Changeover Specialist**
- Level Three: Add Two Changeover Specialists**
- Level Four: Implement the Advanced Workflow Layout**
- Level Five: Implement the Just-In-Time Workflow Layout**
- Level Six: Implement the Modular Workflow Layout**
- Level Seven: Implement the Integrated Workflow Layout**
- Level Eight: Implement the Comprehensive Workflow Layout**

This list is progressive, in that as you develop an alternative system of manufacturing I would recommend implementing each Level and then progress onto the next when you are ready. However, there is no reason why you should not immediately pick Level 6 as the most appropriate starting point, for example, and/or mix and match parts of each of the eight alternatives.



Level One: Implement Press Customization

The first step in improving any changeover performance is to ensure the work area is properly prepared so everything that is needed for the activity is in place. There are many different materials, tools, components, parts, supplies, information, and work-in-process resources required to complete each step in the changeover process. These activities could include installing the stripping and the banking tools, it could be nicking a die, it could be taking an impression, and it could be patching up the job to achieve a kiss cut impression.

Everyone of these activities requires tools and equipment, materials and supplies, parts and components, and information to complete the specific task. Every one of these resources is either permanently located at the site of the activity; or it is temporarily delivered to the site of the activity, and is returned to a dedicated storage location; or it is a consumable resource, which must be replenished as it is used; or it is work-in-process, which is transformed by the activity; or it is product and waste, which must be managed and delivered to the correct location; or it is information, which is required to guide the activity, and information, which is generated by the activity, which must be managed and delivered to the correct location; it is the space itself, which must be minimized to reduced cost, but which must be large enough to accommodate the safe execution of the activity; and it is the integration with the internal and external customer-supplier chain to coordinate the delivery of everything needed to execute each task in a lean and an efficient manner.



The goal is to be able to complete a specific diecutting-converting task with minimal preparation time, and with movement from and around the activity to access tools and



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"Ignore people who say it can't be done." *Elain Rideout*

materials and information and resources.

In evolving to a fast and an efficient NASCAR Pit Crew Changeover it is essential to organizer the work area using the model of the Hospital Emergency Room.

In this specialized environment every single item is pre-determined and pre-checked; everything is in optimal condition; everything is stored as close to the action as possible without crowding the activity; everything is stored in the identical location it was stored in as it was every other time the work area was used; every material, every supply, every tool, every piece of equipment, every piece of information, and every component, is stored in a predetermined location, and consistently applied location; everything that is needed is available and nothing that is not needed, the area is as compact as possible, but not so compact as to inhibit the activity; at the end of every cycle, the work area is purged, restocked, and prepared for the next emergency; during the activity the work area is restricted with only essential personnel admitted; every team player has a designated role and a designated position during the activity; and every team player understands the sequence of events and is ready on cue to provide the technical assistance required.



They also became members of this elite team after extensive training and education. This is the same as press changeover! You may disagree, but in principle the only difference is the activity, the tools, and the skills being applied. The principles and the practices of how this room or work area is organized is identical to the principles and practices used to organize fast press changeover.

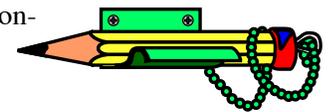
Imagine you are the chief surgeon of a crack medical team called upon to perform an emergency operation on a patient in a life or death situation. When you walk into the operating room and to the patients side, the entire team is assembled and ready in their designated positions, and every tool, material, supply and specialized piece of equipment is exactly where it is supposed to be, and you can be confident it is in optimal condition. This entire scenario is set-up for speed of execution, for quality of action, for consistency

"Waste can be defined as anything other than the minimum amount of equipment, material, parts, tools, space, and the worker's time, which are absolutely essential to add value to the product."
Fujio Cho - Toyota

of results, and is designed to complete the activity in the shortest possible time. At the conclusion of the operation, and as the patient is wheeled to the recovery room, you can hear the team behind you cleaning, purging and resetting for the next emergency, whenever it will take place.

Of course we are not surgeons, and diecutting is not strictly a matter of life and death, although admittedly, it often feels like it is! But the organization principles, the type of meticulous preparation, the consistent layout of everything needed, and standardization of materials, parts and components, is exactly the detailed preparation we need in diecutting changeover to be effective.

These organization recommendations must be the first step in minimizing changeover time as they create an optimal working environment, which will build a foundation for exceptional performance. This is the most critical recommendation as this must be your starting point for every one of the different layout options, as poor on-press workstation organization is a key source of non-value-added time.

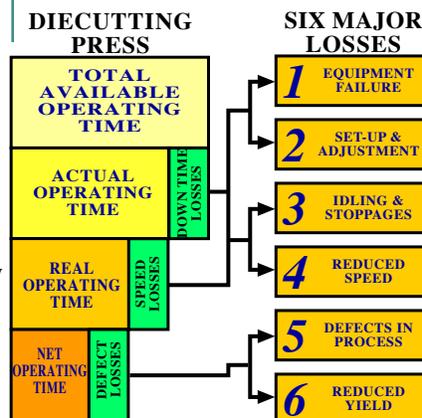


Level Two: Add One Changeover Specialist

The keys to the new discipline are based around an understanding and the implementation of *Time and Motion* and *Just-In-Time Principles*, and an adoption of a more effective organization structure for preparation and execution of press changeover. These include the discipline of organizing using the principles and practices implemented in a *Hospital Emergency Operating Room*, and by adopting the competitive team changeover principles and practices used in a *NASCAR or Auto Racing Pit Crew Changeover*. These can be, and they should be, implemented gradually, with daily

practice improving performance and competence in these basic and very understandable disciplines.

An important element of making these changes must be a recognition that a meticulous and a continually improving preparatory

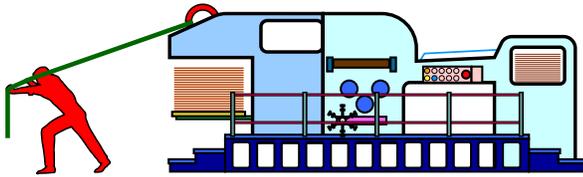




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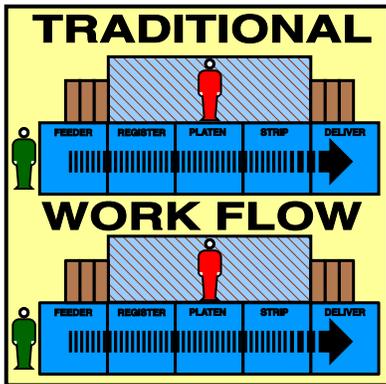
"Insanity is doing the same thing over and over again and expecting different results." Albert Einstein

checklist is vital to faster and simpler changeover. Which brings us to the fundamental importance of teamwork in the new system of manufacturing.



The current method of press make-ready is primarily an **Incremental Process**, in which a series of predictable tasks are executed in a sequence, one after the other. This method of working is neither time efficient nor does it utilize available resources effectively. The alternative is the **Simultaneous Process**, in which a team of people, with pre-determine duties and responsibilities, execute a series of pre-determined activities, in a coordinated and a choreographed manner, designed to changeover in 30 minutes or less!

This is one of the more common techniques used in Europe. Two crafts people in the department are selected as



changeover specialists, and rigorously trained in all of the key techniques necessary. Their primary role is to prepare for, to assist the operator, and to complete a technical close out of every press changeover. Generally, only one specialist is on duty at one time, while the other is running a

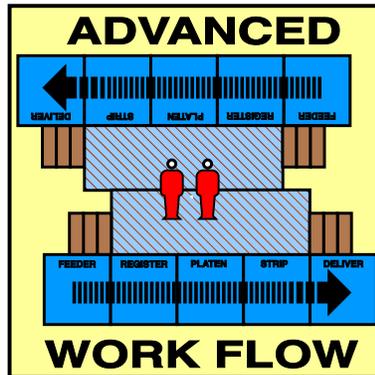
press or working in a pre-press discipline, however, they should swap positions every two weeks.

Level Three: Add Two Changeover Specialists

This is simply a variation on **Level 2** where the press operator is assisted by two changeover specialists. This can be accomplished by training 4 individuals, with two on-duty, and two ready to replace them on a two-weekly basis. The advantage of this approach is simple logistics.

Level Two and Level Three represent the most common approach to fast press changeover, as the process of building and creating the teams is relatively straightforward, and relatively painless.

Level Four: Implement the Advanced Workflow Layout

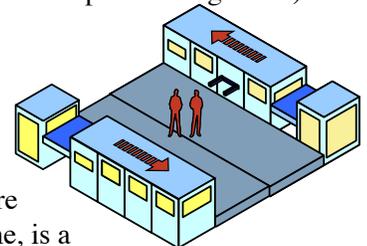


This is where we begin to reorganize the workplace to more effectively utilize our manpower resources. The Traditional Workflow, *see left in first column*, consisted of each press aligned in the same direction and often positioned side-by-side. This outdated layout of equipment creates barriers to cooperation, it prevents either operator responding to the needs of the other operator or to be able to monitor the press as it runs, and it undermines teamwork and the idea of shared responsibility.

In the Advance Workflow layout for presses, *see above*, one of the presses is rotated 180 degrees, so the platforms of the two presses create a common working area between the presses. (This is most effective, when one or both of the press platforms are extended, to provide a more effective and a safer working environment for press changeover.)

This means the two operators form a team of two, whether by default or out of necessity.

See right. The changeover activity, unless both presses are in make-ready at the same time, is a cooperative venture, with long term analysis showing changeover to be a 1.5 person activity.



Naturally, this layout would be a significant advantage when added to the recommendations of Level One through Level Three.

Level Five: Implement the Just-In-Time Workflow Layout

Level Five requires rotating two presses as before, however, in this attack on the system of diecutting manufacturing, sufficient space is left between the presses to accommodate a pre-press discipline. Often referred to as a Just-In-Time Work Flow, the manning of this work unit consists of three technicians, who after a period of training are capable of performing all of the functions of diecutting and pre-press.

As all of the platforms and the work areas are at the same



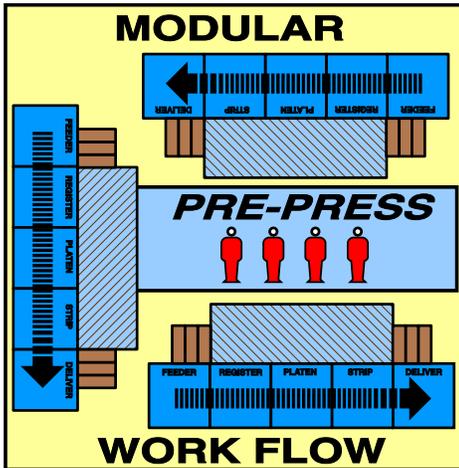


level, it is possible to observe both presses and the work in pre-press from any vantage point in the work cell. This results in having 3 or 2 personnel available for each press changeover, depending upon the flow of work.

This is a highly effective team environment, in which education, research, and skill development are inevitable outcomes. The three personnel share all of the responsibilities of maximizing productive output, *see above*, however, one member plays the role of team leader, a role which should rotate between the three team members on a monthly basis.

Level Six

Level Six: Implement the Modular Workflow Layout

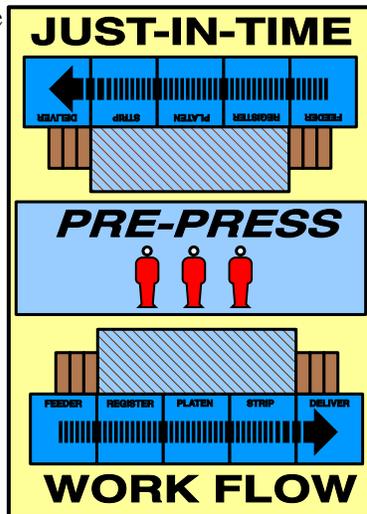


Level Six provides a similar work environment, however, instead of two presses, three presses are aligned around a central core of the pre-press discipline. This is generally a four person work team, however, many organiza-

tions implement this Modular Work Flow with only a three person team.

As in Level Five the goal is that every team member becomes interchangeable, and this work environment lends itself to rapid education and to fast skill development. As in Just-In-Time Work Flow, the position of Team Leader can rotate between team members, however, the timing of the rotation for this work system is usually every three months.

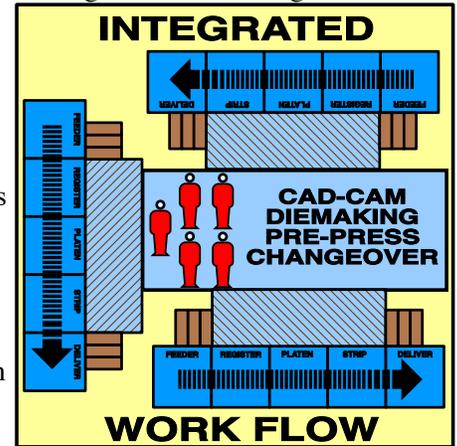
Most organizations begin this process with a four man or five man team, however, as the team gains competence and confidence, it is quickly apparent the additional team mem-



bers are no longer essential to running this efficient system of diecutting manufacturing.

Level Seven: Implement the Integrated Workflow Layout

Level Seven is a progression from Level Five and Level Six, however, the major change in this work organization method, is two diemakers and two diecutting workstations are integrated into the pre-press discipline. This generates a six person team.



The long term goal of this team is interchangeability between every team member, however, the primary benefit of the integration of the diemaking team is the improvement of the tooling as a result of the knowledge gained by participating in press changeover, and in pre-press activities.

As this represents a more complex system of manufacturing, team leadership is usually fixed, however, two personnel are constantly trained to provide back-up and coverage for the team leader position. The long term goal is to teach the diemakers diecutting, and to teach the diecutters diemaking. The benefits gained by this inevitable exchange of knowledge and skill is the ability of the entire team to build and sustain a high output work unit.

Level Eight: Implement the Comprehensive Workflow Layout

The final step in this progression is to create a layout similar to Level Seven, however, the major innovation in this system of working, is the introduction of a CAD-CAM Work Station, and the introduction of a CAD CAM Technician to the work team.

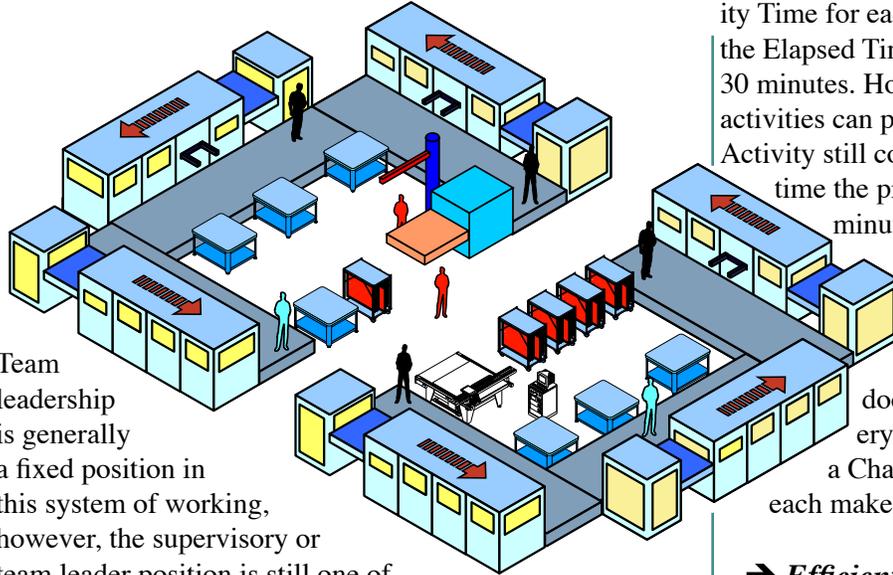
This system of working closes the knowledge loop in diecutting as the CAD-CAM technician and the diemakers are directly involved in the system of manufacturing they design and fabricate tools for. The rapid education of every member of this team leads to almost daily innovation in structural design, in layout, in toolmaking, in press-changeover, in press production, and in converting quality.





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"Organizations exist for only one purpose: to help people reach ends together that they could not achieve individually." ~Robert H. Waterman



Team leadership is generally a fixed position in this system of working, however, the supervisory or team leader position is still one of active participation in every activity involved in the system of manufacturing. This is an excellent format for training for every position, however, it is also an excellent system for converting the diemaking skills into Computer Tool Design Skills, and ultimately Structural Design ability. The primary goal is fast press changeover, and maximum productive output, however, the secondary benefits of daily training and skill development are key benefits of this approach to diecutting manufacturing.

What are the Advantages of a Different Operating Structure?

"In the middle of difficulty lies opportunity." Albert Einstein

The primary innovation, which is essential to productive success in diecutting, is defined as Parallel Processing in SMED or the Single Minute Exchange of Die discipline. This simply means that using a team to complete several tasks simultaneously, rather than a single individual completing tasks one after another, or incrementally, reduces the time the press is out of production.

For example, if an operator is making the press ready, it is necessary to exchange the steel rule die, the patch-up sheet, and the female counter, then the male and female stripping tools, including the bottom pin rack or the bottom pin tool, then the male and female blanking tools must be exchanged and the swords reset. If this takes a conservative ten minutes per tool set, the Activ-

ity Time for each tool set changeover is ten minutes, but the Elapsed Time, or the time the press is not producing, is 30 minutes. However, when using a three man team these activities can proceed simultaneously, and although each Activity still consumes 10 minutes, the Elapsed Time or the time the press is not producing is now reduced to 10 minutes!

However, this is not just a numbers game, the benefits of using teams to change the press over from one job to the next can and does have profound impact on the ability of everyone in each work team. The benefits of using a Changeover Team to work together to complete each make-ready include:

- ➔ **Efficient Parallel or Simultaneous Processing.**
- ➔ **Faster completion of key tasks.**
- ➔ **Rapid knowledge, skill & experience sharing.**
- ➔ **Greater Uniformity and Performance Parity.**
- ➔ **A Reduction in the stress and the fatigue of a challenging activity.**
- ➔ **More effective standardization, simplification and streamlining of key activities.**
- ➔ **Faster Problem Solving and more effective innovation and progressive improvement.**
- ➔ **A self regulating, disciplined, more focused work team.**
- ➔ **Progressively faster, better, simpler, and lower cost press changeover.**
- ➔ **Friendly competition between several changeover teams.**

These are obviously the benefits of effective teamwork in any activity, however, it would be naive to think these benefits will accrue from day one. The key to any effective team is **Practice, Practice, and more Practice**. If you are determined to be successful it is essential to invest in team building.

For example, this will bringing the entire team in on a weekend to make-ready a typical job, then changeover to the next job, then changeover to the next job! With facilitators and team members monitoring and video-taping the activity, the practice day should end with a discussion of what happened, what worked, and what did not work! This is





The ABC's of Diemaking & Diecutting

"I must create a System or be enslaved by another man's." ~William Blake

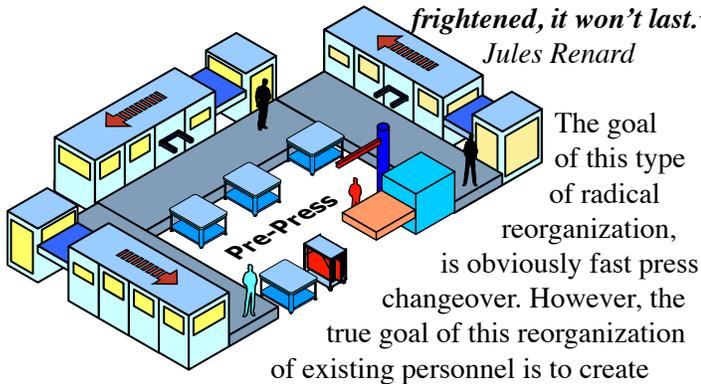
your Superbowl Team, and the last team to win the Superbowl invested a great deal of time in planning, in practice, and in an evaluation of what happened, and the Superbowl was not their first game together.

Remembering our Mission of Safety-Speed-Quality & Cost, on page one, if not for any other reason than the safety of the work team, extensive practice time is critical. And realistically, this is a key part of the investment necessary to build a winning Changeover Team!

Summary

"There are moments when everything goes well; don't be frightened, it won't last."

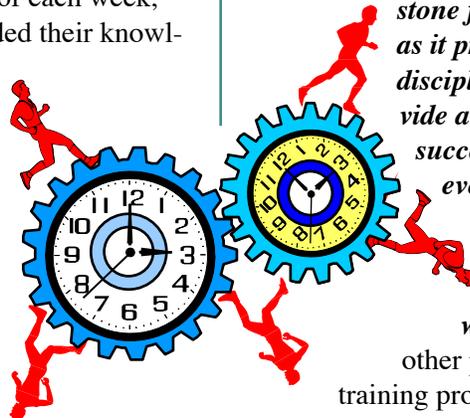
Jules Renard



The goal in any operation is to level the knowledge, the skill, and the experience playing field, and to continuously and evenly upgrade the competence of every person in the team. The goal is to get everyone to know what everyone already knows. And when new information, new ideas, new solutions, new techniques, and faster, better, and simpler ways of doing things are revealed each day, it is vital to have such a bullet proof system of information collection and distribution. Which means at the end of each week, every person has the opportunity to upgraded their knowledge and their benchmarked procedures in exactly the same way.

The goal in any operation is to level the knowledge, the skill, and the experience playing field, and to continuously and evenly upgrade the competence of every person in the team. The goal is to get everyone to know what everyone already knows. And when new information, new ideas, new solutions, new techniques, and faster, better, and simpler ways of doing things are revealed each day, it is vital to have such a bullet proof system of information collection and distribution. Which means at the end of each week, every person has the opportunity to upgraded their knowledge and their benchmarked procedures in exactly the same way.

Fast press changeover is not the most difficult challenge we face, building a strong diecutting team, with seamlessly interchangeable team members is the most difficult challenge, and the true goal of this initiative.



We have to convince the existing team of the importance of radical change; we have to create a mission for this initiative, which everyone in the team enthusiastically endorses; and we have to create a unity of purpose, which will drive the daily activity of everyone involved in achieving and sustaining fast team press changeover. The quotation; ***"Organizations exist for only one purpose: to help people reach ends together that they could not achieve individually;"*** is extraordinarily apt for what we have to do.

Teamwork and teambuilding are the keys to success and to job security in the Converting Industry. However, it is essential that the management team ***"Think Outside the Box,"*** forgive the pun, to create an operating structure, which is more conducive to the task at hand, and is not the legacy of an outmoded and outdated system of manufacturing.

In my experience, organizations, management teams, and work teams are working as hard as they can to improve productivity in diecutting. What is frustrating everyone is the lack of time to attack the problem and the resulting minimal productive improvement. This has to be compared to increasingly aggressive market demands, which are growing faster than our ability to respond.

It is my contention and my experience that by committing to the diecutting organizational changes outlined in this article, you will experience a rapid and a consistent growth in productivity, and a remarkable and a dramatic fall in operating cost.

DieInfo Products & Services

I would certainly be remiss in not recommending the latest DieInfo Publication:

"The ABC's of Fast Press Changeover."

"This technical training program represents the cornerstone for an effective organization strategy, as it provides a detailed guide to 25 key disciplines or building blocks, which provide a foundation for fast press changeover success. It is an essential reference tool for every professional diecutting operation."

I would also strongly recommend visiting the DieInfo Web Site, www.dieinfo.com, and reviewing our other publications, technical articles, and our training programs for diemakers and for diecutters.

