

1100 West Anderson Court Oak Creek, WI 53154 414.216.6900 Fax: 414.768.7950 www.grunau.com

To continually examine our processes to provide greater value to our customers without waste.

## **The Lean Line**





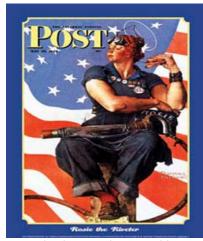
## Focusing on the Waste: "Over-Processing"

The 7<sup>th</sup> of the 8 common wastes that we are challenging this year in our War on Waste (WOW) is "**Over-Processing**". As mentioned in a previous Lean Line, this waste is related to "quality" (vs. the 6<sup>th</sup> waste "Over-Production" which can be associated more with "quantity"). "Waste" is defined as anything other than the MINIMUM amount of time, equipment, tools, material, parts, people, and space required to ADD VALUE to the product/service/information-data.

## Examples of **Over-Processing** waste at Grunau include:

- Over-installing from a quality standpoint
- "Selling a Chevy but installing a Cadillac" (for example, a job was sold with black steel pipe specified but then the customer decided they wanted stainless steel pipe or we arbitrarily put in stainless steel and didn't charge differently)
- Changing filters and belts without authorization (not sold with job)
- Over-engineering
- Using old specifications (over-specifying)
- Multiple reviews (checks & balances); Too much control
- Extra process steps; Doing more than necessary to get the job done
- Hand estimating vs. error-proofing on computer
- Writing down phone info instead of keying directly into computer

Below are some specific jobs at Grunau where **Over-Processing** waste occurred:



We quoted the replacement of a 100-ton condensing unit and our customer told us they required several competitive bids. We bid the replacement without changing the electrical disconnect since it was working, and we knew our competition would not include it. We also included the bare minimum of support steel.

When our technician was on the project, he advised the customer that a new disconnect would be a good idea and the customer agreed. The tech also decided we should fabricate an extended steel frame to mount the disconnect and went ahead with the fabrication and installation of the steel. Our salesman was never in the loop so extra monies were never discussed. The job was bid at \$90,000 with an estimated cost of \$75,000, but cost us \$89,000 to perform.

In the technician's defense, the upgrades are what customers might expect from Grunau but the customer assumed because we didn't ask for extras at the time of the work, they were included in the original proposal. However when we approached him at the end of the project with the financial impact, he said his budget couldn't handle the costs.

On 2 other projects where we bid work in steel grooved pipe, the tech determined that copper with pro-press fittings were the better installation since they were in an active computer room under the raised floor where hot work can be a problem. Again the tech went to our customer contact with what he felt was a better installation solution without conferring with the salesman responsible for the estimate. The cost impact was an additional \$4,500 in each case. The customer agreed to the upgrade but since there was no discussion about cost, by the end of the project the customer was not interested in talking about paying more. The pro-press was the correct solution, but we should have discussed the cost impact before installing the more expensive material.

Be sure you are providing our customers with quality work but be careful about going beyond the scope, unless the job is charged accordingly; otherwise the **Over-Processing** becomes waste. Let one of the Lean Team members know how **you** have helped us win this **War on Waste**.