

Engineer's Casting Services Reference Provided by Midwest Metal Products

Fast answers to reducing costs at your company by leveraging the expertise at MMP

When you partner with MMP, you get more than parts. You get the solutions to your casting problems. We lower your costs using our in-house capabilities- with our castings or those you supply- to provide finishing, heat treating, and engineering support. Relieve the stress- it's like having a metallurgist on YOUR staff!

Castings

MMP Guarantees our quality!

**Weight- up to 1500LBS (iron)
or 1100lbs (steel) ANY alloy**

Stainless Steel Low Alloy Steel

Plain Carbon Steel

Ductile and Cast Irons

Ni-Hard and Ni-Resist Cast Irons

Hi-Chrome Abrasion Resistant Irons

See website for current lead times or

email us at CastingQuestion@

MidwestMetalProducts.com

Finishing Services

**Our expertise lowers both
risk and costs for you.**

**Finishing parts we make
or those you supply- why
do in-house what can be
done by experts?**

Heat Treating

Machining

Painting

Assembly

Blanchard Grinding

Sand Blasting

Or email us at:

FinishingQuestion@

MidwestMetalProducts.com

Heat Treating

Our on-staff metallurgist can advise you which heat treating will best fit your specific application..

Case Hardening

Straight Hardening

Induction Hardening

Annealing

Oil Quench

Air Quench

Blue Coating

Or email us at

HeatTreatingQuestion@

MidwestMetalProducts.com

Engineering/Design

Need expert advice? Our team, led by a trained, on staff metallurgist, is the solution provider for:

Reverse Engineering

Weldment to casting conversions

Models Simulations

Solidification and flow modeling

Prototyping to production

Tool-less prototypes

Or email us at:

EngineeringQuestion@

MidwestMetalProducts.com

**Our value-added
services make your
life easier with
one-stop shopping**

**Your Heat Treating
furnace only used part
time or for small loads?**
Share in our efficiency to lower your costs. Heat Treating alone or Casting + Heat Treat- your choice!

What does *that* mean?

Wonder what a casting word means?

Don't be confused, just go here:

Bit.ly/castingdictionary

An Engineer asks: "How can I reduce parts count AND cost?"

It may be easy. Do you have components that are welded together? 'Weldments' are labor intensive. Plus each sub-piece must be carried in inventory or cut from plate or pipe- both labor intensive. A single casting can decrease parts count, lower total cost, and improve reliability- just like integrated circuits or 'chips' do for electronics. Download a free "Weldment-to-Casting Evaluation" certificate (worth \$1500) on our website or at <http://bit.ly/castingcertificate>

**Need a consultation with a
metallurgist?**

**AskTheMetallurgist@MidwestMetalProducts.com
is the best email**

Need a Quote/RFQ?

Direct web: www.Bit.ly/mmpquote

Fax to: 507-452-7318

Email:

Quote@MidwestMetalProducts.com



I want to talk one-on-one with a professional about a problem we are having with a part.

Send your question directly to an expert using : AskTheMetallurgist@MidwestMetalProducts.com

If we wanted access to a metallurgist on a regular basis, is that possible? Anything you order from MMP is cast under the trained and watchful eye of metallurgist Joe Plunger. Because metallurgists are few and far between, he also does consultations on a retainer basis. This gives you/your staff/company access for a certain number of hours each month. The savings usually far outweigh the cost. For more info, look at www.MidwestMetalProducts.com/consultations.

If I wanted to find out what a casting term meant, where is the best source? Don't be confused by a term. Like most specialties, casting has a language all its own. If you're being pelted with terminology, go to Bit.ly/castingdictionary for answers.

Why is having a metallurgist onsite important?

In the casting world, it's the difference between a house painter and Picasso. Between a butcher and a surgeon. MMP's Picasso is Joe Plunger. There are over 1000 variables when melting metals into your part.

When foundries have a problem making a part, or heat treating, they call an expert, a metallurgist, in for a consultation. Metallurgists are highly trained professionals who are few and far between. At MMP, we only have to call upstairs!

All foundries have casting challenges, called "scrap rate" in the industry. The fewer mistakes, or scrap rate, the lower the price you pay. With a metallurgist on staff, we have the certified expert to plan and identify problems before they become mistakes or scrap.

With metallurgist oversight, you are assured MMP meets or exceeds any quality specification you demand. If MMP can't meet the specification you require, we won't even quote!

What is a 'Weldment to Casting' evaluation- and why should I consider it?

Welded parts are labor intensive, subject to variation piece to piece, and, depending on the welder's skill, may have inherent weaknesses you'll never see. MMP has a zero-risk, no cost program to evaluate weldments to determine if a casting would be stronger, have faster turnaround times, and higher precision. Lower part costs combine higher reliability, interchangeability, and smiling end users!

How do I look for weldments that could be evaluated for conversion to a casting?

Number of components: More pieces per part means more chance of failure, higher reject rates, in service failures, and labor costs

Field problems: Failures at joints or from hot zones of welding.

Geometry: More complex weldments gain tremendous advantages from a casting

Inches of weld: Labor time, weld defects. Welding is the most expensive per cubic inch material

Dimensional consistency: Warpage, stresses, piece fit, interchangeability are all improved with a casting

In house scrap/rework frequency: The higher the rate, the greater the savings from a casting

Appearance: Clean streamlined corners and fillet radiuses vs weld bead, logo/part numbers/etc can be cast directly into part.

Quick Connect Points at MMP

AskTheMetallurgist@MidwestMetalProducts.com

FinishingQuestion@MidwestMetalProducts.com

CastingQuestion@MidwestMetalProducts.com

EngineeringQuestion@MidwestMetalProducts.com

Quote@MidwestMetalProducts.com

HeatTreatingQuestion@MidwestMetalProducts.com

Consultation@MidwestMetalProducts.com



*The only foundry
owned and operated
by a Metallurgist*