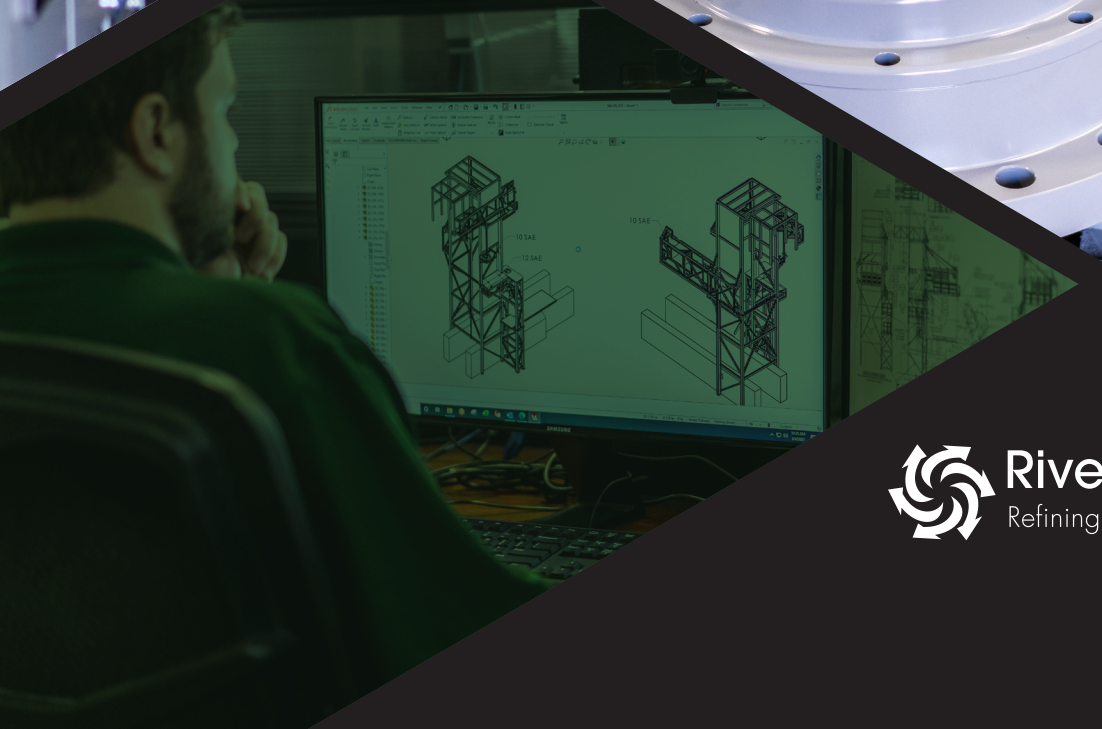


Shredder Control Integration and Automation

Providing People with Technology to Work Smarter



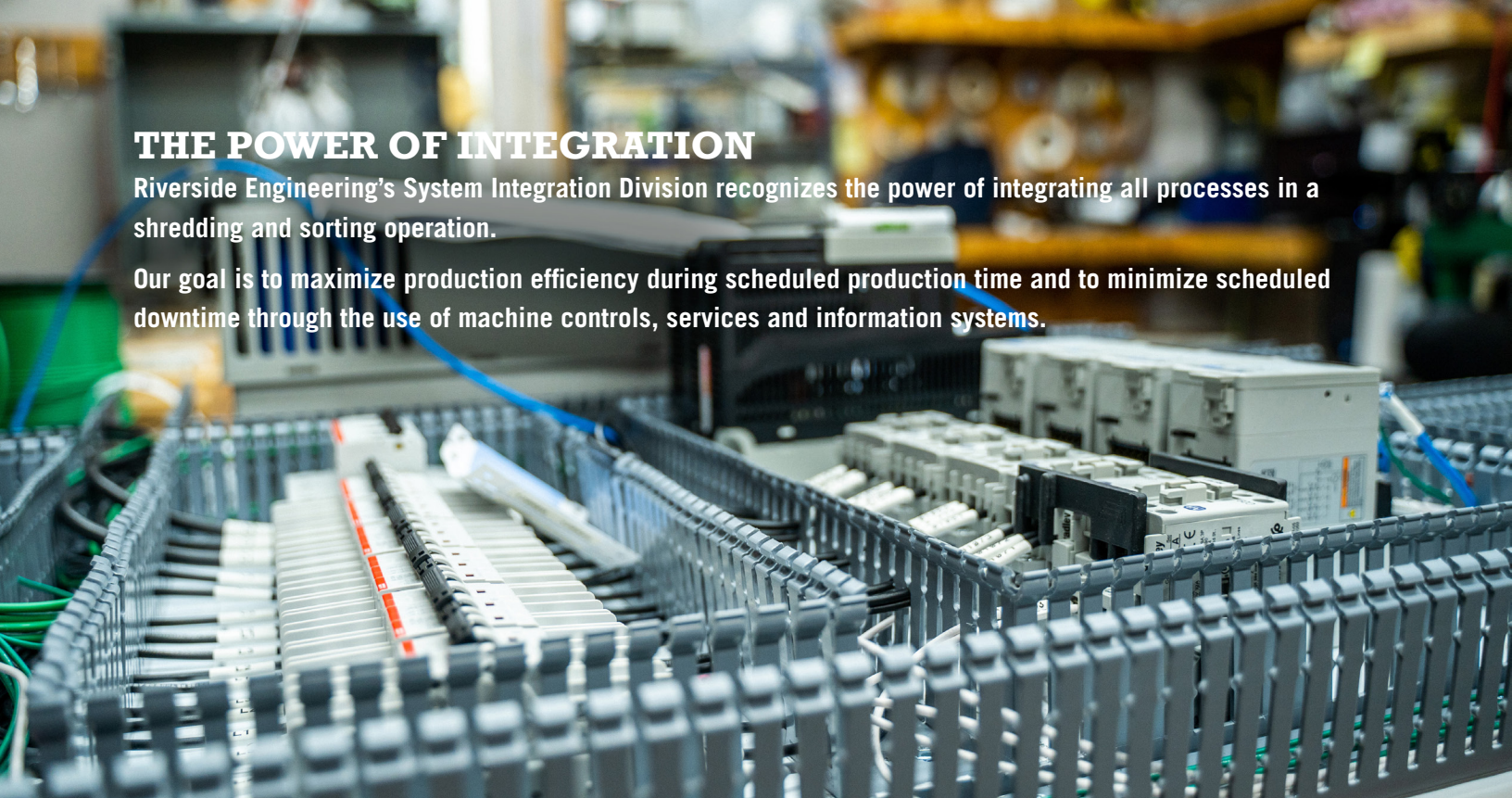
Riverside Engineering
Refining Scrap Metal Recycling

866.764.7567
megashredder.com

THE POWER OF INTEGRATION

Riverside Engineering's System Integration Division recognizes the power of integrating all processes in a shredding and sorting operation.

Our goal is to maximize production efficiency during scheduled production time and to minimize scheduled downtime through the use of machine controls, services and information systems.



CONTROLS

Industrial automation is a crucial link between people and machinery. Our structured approach to the design and engineering of a total control package provides for reliable and safe plant operation.

Industrial Automation Equipment

- » Programmable Logic Controls (PLC)
- » Motor Control Centers (MCC)
- » Touch screens (SCADA, HMI, MMI)
- » Control panels and operator stations/chairs

Control Devices

- » Networked I/O utilizing Ethernet and Device Net protocols
- » Intelligent overload relays for added protection and information

Supervisory Information and Instrumentation

- » Temperature and vibration
- » Scales and scoreboard displays
- » Power and water meters

SERVICES

As your business grows and your plant becomes more complex, a service provider is needed who can maintain the level of knowledge, skills and experience necessary to effectively manage your system.

Official Rockwell Automation System Integrator (RASI)

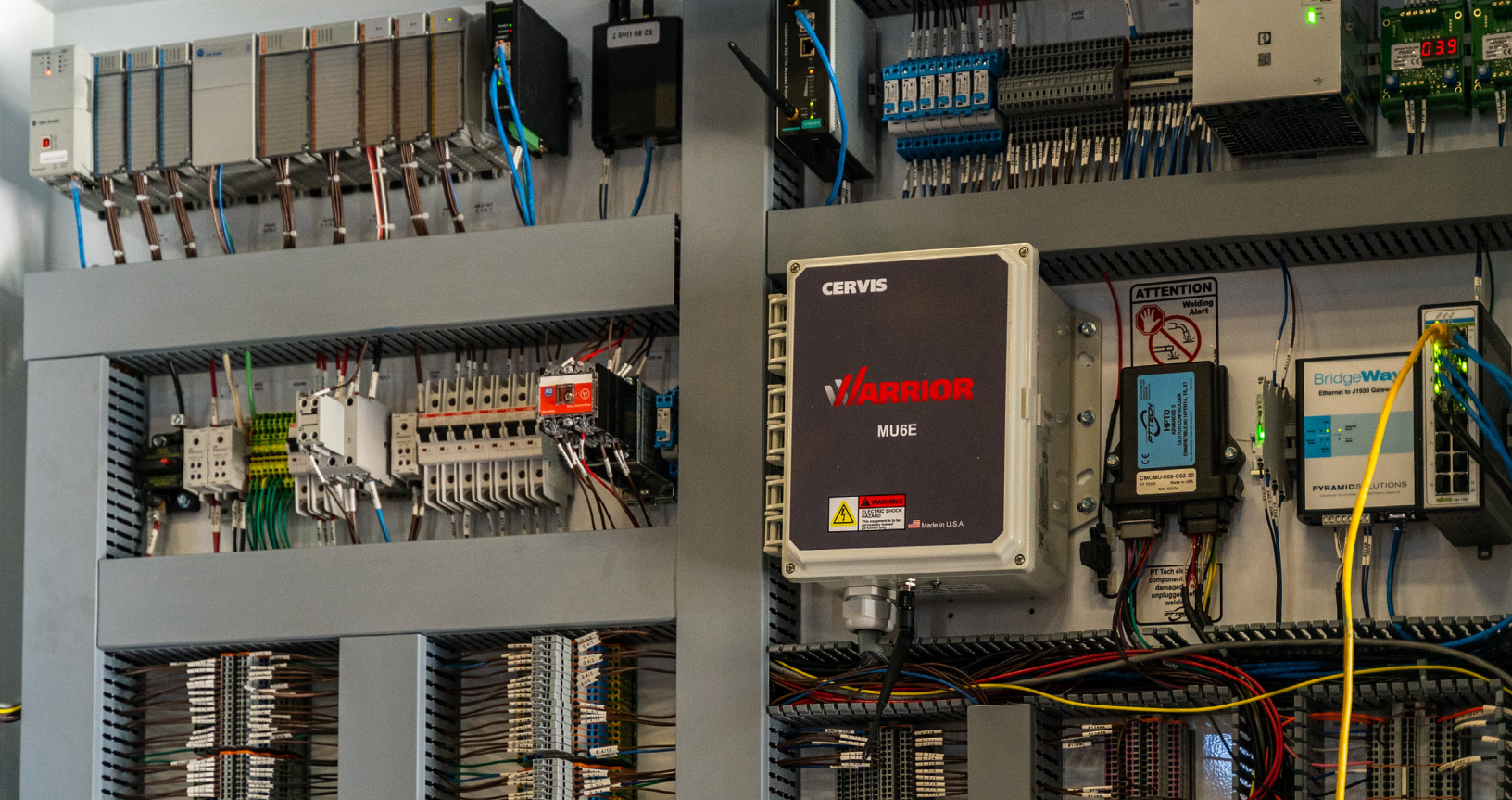
- » Proven to be well versed and up to date with current programming and design techniques
- » Tied to a network of support that will help find answers

Electrical Panel Assembly Shop

- » Complete custom panel design and assembly shop
- » Listed by Underwriters Laboratories (UL & CUL)
- » Maintains inventory of critical components

Technical Support

- » On-site emergency support within 24 hours
- » 24/7 telephone and online support
- » Troubleshooting, repairs and training for proper operation



FEED AUTOMATION

Shredder cruise control allows shredders to respond to mill loading faster and more consistently than an operator in manual control, giving you maximum daily output.

How the System Works

The system works similar to a cruise control in a car. Initially, the PLC receives the shredder motor outputs and your machine's operating characteristics to create an operating profile. Using that profile, the Shredder Cruise Control will then automatically adjust the speed, direction and height of the feed roll which regulates the flow of scrap. Plus, the system is designed for the operator to take manual control at any time.

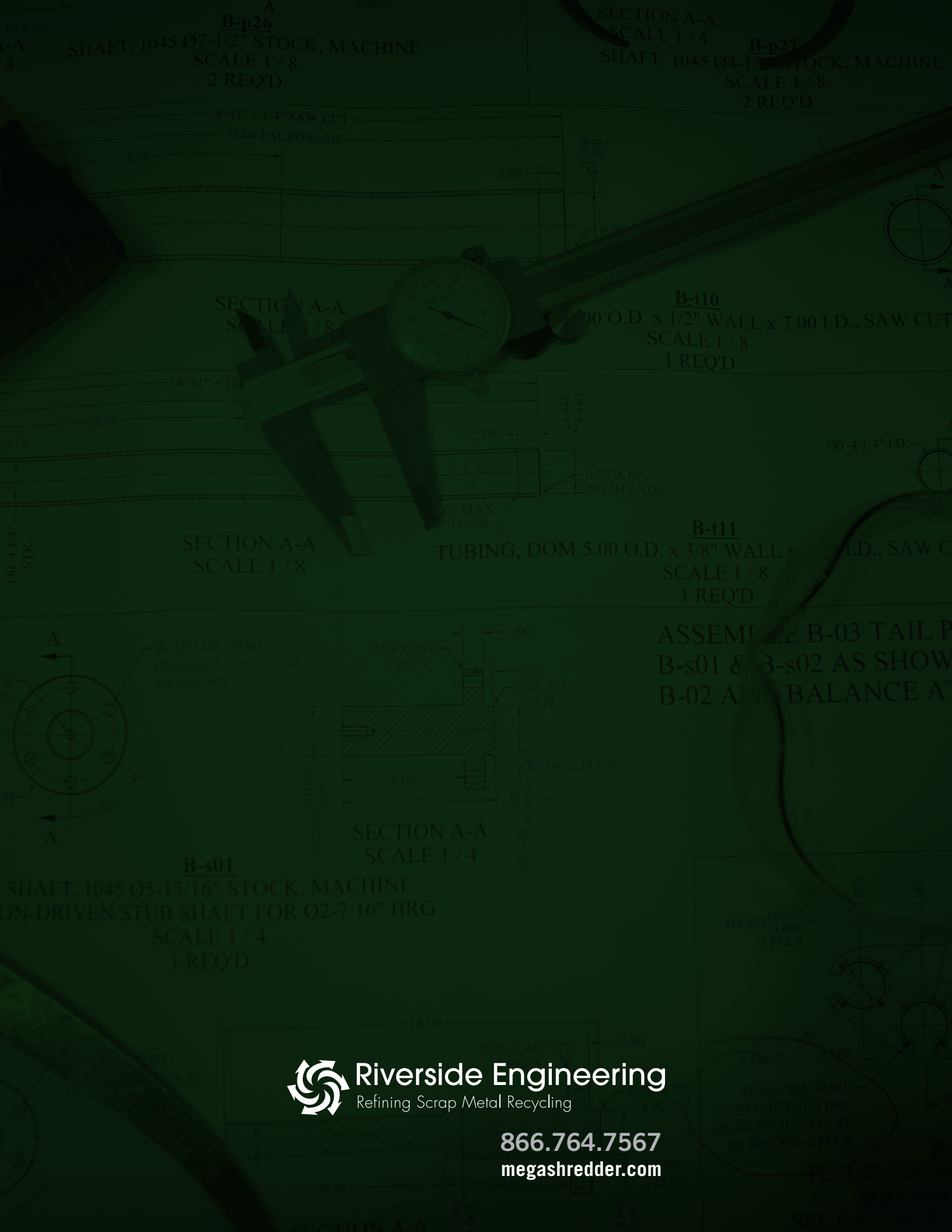
How the System Helps your Shredder Reach True Output Potential

- » Increases shredder efficiency and throughput
- » Reduces operator stress and distraction
- » Incorporates seamlessly into new and current shredders
- » Minimizes the risk of plugging or overloading

WATER AND FOAM INJECTION SYSTEMS

Riverside Foam and H2prO Systems are designed and built to:

- » Increase effectiveness in dust and odor suppression
- » Highly effective in capturing shredder emissions (particulates, hydrocarbons, VOCs, blue smoke)
- » Reduced frequency of shredder chamber explosions
- » Significantly less water consumption in shredding process
- » Reduced waste disposal weight/cost by reduced moisture content
- » Moisture reduction improves downstream separation and non ferrous metal recovery



B-p26
SHAFT, 1045 Ø7-1/2" STOCK, MACHINE
SCALE 1/8
2 REQ'D

B-p27
SHAFT, 1045 Ø4-1/2" STOCK, MACHINE
SCALE 1/8
2 REQ'D

SECTION A-A
SCALE 1/8

B-t10
Ø6.00 O.D. x 1/2" WALL x 7.00 L.D., SAW CUT
SCALE 1/8
1 REQ'D

SECTION A-A
SCALE 1/8

B-t11
TUBING, DOM 5.00 O.D. x 3/8" WALL x 7.25 L.D., SAW CUT
SCALE 1/8
1 REQ'D

ASSEMBLY B-03 TAIL P
B-s01 & B-s02 AS SHOWN
B-02 AND BALANCE AT



B-s01
SHAFT, 1045 Ø5-15/16" STOCK, MACHINE
ON-DRIVEN STUB SHAFT FOR Ø2-7/16" BRG
SCALE 1/4
1 REQ'D



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