

PRODUCT LINE OVERVIEW

PRODUCTION CAPABILITIES



INGOT

- AOD INGOTS: 13" - 70"
- ESR INGOTS: 17" - 44"
- VAR INGOTS: 17" - 40"

BILLET

- ROUND: 4" - 39" RD
- RCS: 4" - 39" RCS

PIGS

- 15 POUND HALF ROUNDS - 52,000 POUND HEAT LOTS
- STAINLESS AND NICKEL ALLOY

ROUND BAR

- STAINLESS: 3.75" - 26" OD
- CER LOW ALLOYS: 3.75" - 16" OD
- NICKEL & Cu-Ni: 0.625" - 18" OD
- NITRONICS®: 0.625" - 16" OD

FORGED BLOCKS

- THICKNESS: 4" - 12"
- WIDTH: 12" - 36"

SLABS

- 4" x 15" TO 10" x 42"

NITRONIC® WELD WIRE

- NITRONIC® 50W and NITRONIC® 60: 0.035", 0.045", 0.062"
- BARE WIRE: 30 POUND SPOOLS 0.125" IN STRAIGHT LENGTHS
- COIL ROD: 0.219" to 0.50" IN SELECT NITRONIC® ALLOYS

G.O. CARLSON PLATE

- 0.1875" - 10" THICKNESS
- UP TO 126" WIDE / UP TO 480" IN LENGTH
- STAINLESS, NICKEL ALLOYS, NITRONIC® AND OTHER SPECIALTY CUSTOM GRADES

EAf MELT/AOD REFINED

Custom chemistries and proprietary specification upon request.
NITRONIC® is a registered trademark of CLEVELAND-CLIFFS INC.

AUSTENITIC STAINLESS STEEL

303*	347/347H
304/304H/304L*	348
304N/304LN	926Mo
308L	F44
309/309S	NITRONIC® 30
310/310S	NITRONIC® 32
316/316L*	NITRONIC® 33
316N/316LN	NITRONIC® 40
317/317L	NITRONIC® 50
321/321H	NITRONIC® 50HS
330	NITRONIC® 60



AVAILABLE IN ROUND BAR

PRECIPITATION HARDENING

15 - 5 17 - 4 A286 EC450

NICKEL ALLOYS

EC200/EC201	EC601	EC825
EC400	EC800/EC800H	904L
EC600	EC800AT	

ADDITIONAL NICKEL ALLOYS PRODUCED AS CONSUMABLE ELECTRODE REMELTED PRODUCT

FERRITIC STAINLESS STEEL

430 405 409 409Cb

MASTER ALLOY

AM355	CG8M
CA15	CH20
CA40	CK20
CA120	CD3MN
CA6NM	CD4MCuN
CB7CU-1/CU2	CN2MCu
CD4MCu	CN7M
CF3	HH
CF3M	HK
CF8	HP
CF8C	HT
CF8M	NITRONIC® 50
CG3M	NITRONIC® 60

DUPLEX STAINLESS

F-51 (UNS S31803)
EC32750 (F-53 • UNS S32750)
EC255 (UNS S32550)
2205 (UNS S31803)
F-60 (UNS 32205)
EC25540 (HI PREN)

MARTENSITIC STAINLESS STEEL

403	416*	440C	F6NM
410	420	EC125	13Cr4Ni
410Cb	422		



AVAILABLE IN ROUND BAR

COPPER NICKEL ALLOYS

EC71500 (70/30 Cu-Ni)
EC70600 (90/10 Cu-Ni)
EC63000 (NiAlBr)
EC63200 (NiAlBr)

EAF MELT/AOD REFINED/CONSUMABLE ELECTRODE REMELTED: ESR/VAR

VACUUM ARC REMELT (VAR)

304/304L	422	300M	D6AC
316/316L	4240	4330	HP9-4-20
321/321H	EC450	4340	HP9-4-30
347/348	15-5	NiCrMo	EC625
403/410	17-4	K24728	
403Cb/410Cb	A286	9310	

VAR CRUCIBLES:

ROUNDS : 17", 20", 22", 24", 30", 33", 36", 40"
 INGOT CONDITIONING AND CROPPING ARE AVAILABLE
 CUSTOM CHEMISTRIES AND PROPRIETARY SPECIFICATIONS UPON REQUEST
 ALLOYS CAN BE DOUBLE OR TRIPLE MELTED PER SPECIFICATION

ELECTRODE SLAG REMELT (ESR)

15-5	888	EC601	F44
17-4	926Mo	EC625	H11
304/304L	2205	EC690	H13
316/316L	A286	EC800/H/AT	JETHETE
321/321H	C20 PLUS	EC825	N-155
347/348	E200	EC6022	NITRONIC® 32
403/410	E36	EC25540	NITRONIC® 33
410Cb	EC255	EC32750	NITRONIC® 40
418	EC276	EC71500	NITRONIC® 50
420	EC400	ECK500	NITRONIC® 50HS
422	EC450	ECHX	NITRONIC® 60
600Cb	EC600	F6NM	S21800

ESR CRUCIBLES:

SLAB: 12" x 42", 20" x 55"
 ROUNDS: 17", 22", 24", 30", 36", 40", 44"
 INGOT CONDITIONING AND CROPPING ARE AVAILABLE
 CUSTOM CHEMISTRIES AND PROPRIETARY SPECIFICATIONS UPON REQUEST
 ALLOYS CAN BE DOUBLE OR TRIPLE MELTED PER SPECIFICATION

CONVERSION OR RECLAMATION MELTING

AOD • ESR • VAR

HEAT TREAT



2 CAR BOTTOM FURNACES
 • STRESS RELIEVING - 28' MAX
 • HEAT TREATING - 24' MAX
 • 1100°F - 2200°F

6 STRESS RELIEVING FURNACES
 • MAX TEMP 1600°F
 • MAX WEIGHT 88,000#

2 HOOD STRESS RELIEVING FURNACES
 • MAX TEMP 1600°F
 • MAX WEIGHT 42,000#

WATER QUENCH
 • 240" MAX



32' FURNACE
 • 6' WIDE x 32' LONG
 • 40,000# CAPACITY
 • +/- 25°F

18' FURNACE
 • 6' WIDE x 18' LONG
 • 40,000# CAPACITY
 • +/- 25°F

32' LOW TEMP FURNACE
 • +/-10°F AT AGE HARDENING AND TEMPERING TEMPERATURES

WATER QUENCH
 • 112,000 GALLONS
POLYMER QUENCH
 • 112,000 GALLONS

WROUGHT PRODUCTS

100,000 SQ FT FACILITY
12 PRODUCTION SAWS
UP TO 60" CROSS SECTIONS

MULTIPLE LATHES
 • LEBLOND LATHE: 65" TO 358" LONG x 6" TO 40" OD x 60,000 LBS.
 • TUDA LATHE: 40" TO 210" LONG x 5" TO 24" OD x 21,000 LBS.

4" TO 11" OD BAR PROCESSING CELL
 • 1000T STRAIGHTENING PRESS
 • CENTERLESS BAR PEELER
 • BELT POLISHER

1" TO 5.50" OD ROTARY STRAIGHTENER AND 1" TO 5.50" CENTERLESS PEELER (GOC PROPERTY HOLDINGS)
UT CONTACT, IMMERSION AND HARDNESS TESTING

FULL CHEMISTRY LAB SERVICE

OPTICAL EMISSION • X-RAY FLUORESCENCE • LECO CARBON/SULFUR • LECO NITROGEN/OXYGEN • H ANALYZER

VIEW FULL CAPABILITIES

