

**AL-6XN® alloy scrubber duct lining in excellent condition after 20 years.  
Now being used in other FGD applications.**



**Specifications**

**UNS:** N08367 **ASTM:** B 688, A 240, B 675, A 312, B 676, A 249, B 804, B 691, A 479, B 462, A 182, B 564, B 366, B 472  
**ASME:** SB-688, SA-240, SB-675, SA-312, SB-276, SA-249, SB-691, SA-479, SB-462, SA-182, SB-564, SB-366 Code Case N-438-3, B-31.1 Case 155-1

**Chemical Composition, %**

	Ni	Cr	Mo	Mn	Cu	Si	C	N	S	P	Fe
MIN	23.5	20.0	6.0	—	—	—	—	0.18	—	—	—
MAX	25.5	22.0	7.0	2.0	0.75	1.0	0.03	0.25	0.03	0.04	balance

**Case History**

In early 1989, the twin 13 foot diameter 317LM stainless scrubber downcomer ducts on the No. 6 unit of the Cane Run Station of Louisville Gas & Electric were replaced. The ducts had perforated from pitting corrosion after several years of service. The boiler involved burns high sulfur coal. Replacement was accomplished with the fabrication of a new carbon steel duct lined with 14 and 16 gauge AL-6XN alloy sheet.

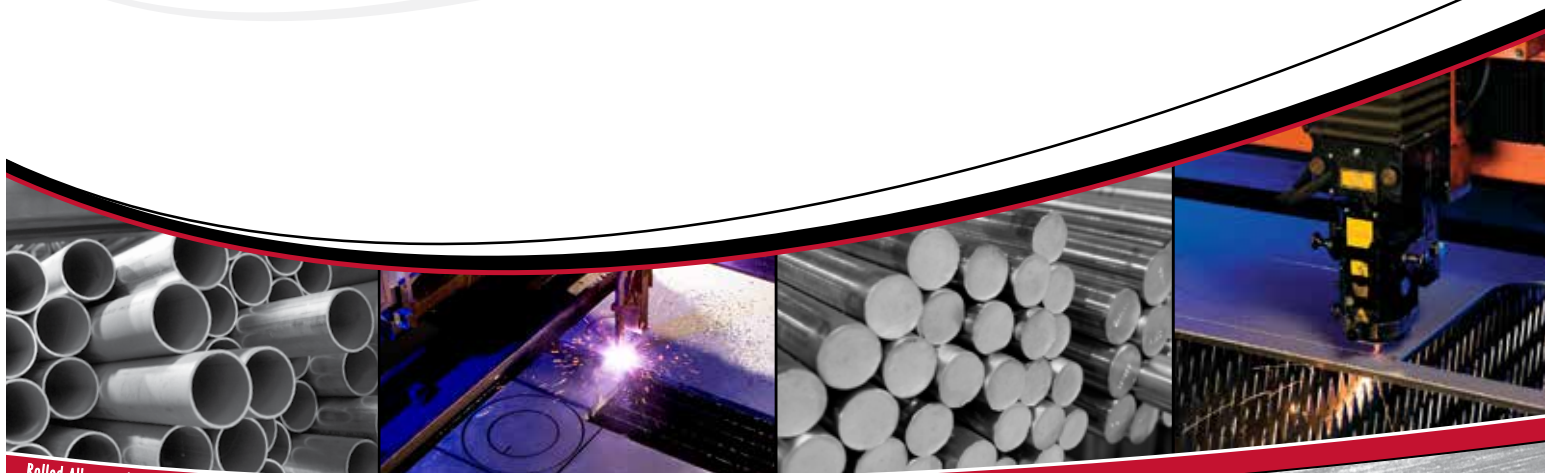
An inspection during a routine outage 14 months after the installation revealed that the AL-6XN alloy was in “like new” condition. In fact, when the light surface film was wiped away, the original line marking was clearly evident.

Welds, accomplished with the GTAW process utilizing alloy 625 filler, also are performing very well. The modified duct lined with AL-6XN alloy remains in service with no reported problems as of the last status check in 1999.

### Case History, Continued

AL-6XN alloy was also chosen as a replacement for a coated carbon steel pipe at the No. 6 unit at Cane Run. A 10 foot long, 16" diameter pipe and four flanges were purchased for the pump suction system used to recirculate the scrubber liquor that quenches the flue gas in the absorber tower. A portion of the pipe is submerged in the hold tank and is continuously in contact with the acidic scrubber liquor.

AL-6XN alloy has a good performance record in power generation condenser systems and is adding to that legacy by handling tough FGD environments. AL-6XN alloy is one of many problem solving alloys Rolled Alloys® makes available for your tough applications.



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