

# GRILOY 43N

## IDENTIFICATION

GRILOY 43N E430-15

## CLASSIFICATION

AWS/SFA 5.4 E430-15

## DESCRIPTION

A basic coated hydrogen controlled electrode manufactured using alloyed core wire depositing weld metal having low carbon and about 17% Chromium. The weld metal consists of ferrite and some martensite in the as welded condition. In order to avoid excessive grain growth, the interpass temperature should not exceed 300°C. The deposited weld metal is of X-ray quality.

## WELD METAL ANALYSIS (RANGE) %

C	Mn	Si	Cr	Ni	Mo	S	P	Cu
0.10 max	0.25 - 0.90	0.25 - 0.65	15 - 18	0.60 max	0.75 max	0.03 max	0.04 max	0.3 max

## MECHANICAL PROPERTIES (RANGE)

TS (N/mm <sup>2</sup> )	EL (%) (L=4D)
460 - 640	20 - 26

After PWHT, 760 - 790°C / 2 hr. Furnace cool to 600°C at 55°C / hr max, then air cool to room temp

## TYPICAL APPLICATIONS

Surfacing valves, suitable for welding Cr-Si-Al steels (Sicranals) with upto 18% Cr used for furnace parts, exhaust ducting's, petrochemical and steam generating industries. AISI 430, DIN 1.4013, 1.4015, and 1.4016.

**HARDNESS OF THE WELD METAL :** 200 - 280 HV10

**ASME IX QUALIFICATION :** QW -432 F-NO. 4, QW-442 A-NO. 7

**MICROSTRUCTURE :** In the PWHT condition, the microstructure consists of ferrite and tempered marten site with some chromium carbide.

**REDRYING :** 300°C / 2 hrs. 5 cycles, 10 hrs total max.

## WELDING POSITION :



## PACKING PARAMETERS

Size (mm)	Length (mm)	AMPS AC / DC (+)	Packing / Box (kg)	Packing / Box (Pcs)
2.5	350	70 - 100	2 x 5 = 10	94 x 5 = 470

3.15 / 3.20	350	80 - 125	$2 \times 5 = 10$	$60 \times 5 = 300$
4	350	120 - 180	$2 \times 5 = 10$	$38 \times 5 = 190$
5	350	160 - 240	$2 \times 5 = 10$	$24 \times 5 = 120$