

Metallurgy & Machinery (metal construction, equipment parts, rollers, stacks, bolts)

Oil & Gas (piping and tubing, valves, fittings, swivel joints, boiler)

Chemical & Paper industry (separators, cracking units, coke drums, absorbers, mixers, scrubbers)

ENi – CI (Nickel 99)

Solid Welding Wire Solid Welding wires for Gas Metal Arc Welding (GMAW or MIG) acc. EN 13479

Main Applications:

Corrosion-Resistant Alloy

Used for welding of cast irons to other cast irons as well as for joining cast irons to mild steels and stainless steels. Readily used for the repair of castings

Standard specifications:

Alloy name*	Product forms	AWS		UNS	
Eni-CI	MIG/TIG/SAW welding wire or rod	A5.15	ENi-CI	W82001	2.4066

Ni 99 (AWS class ENi-CI) is a nominally 99% Nickel wire. Nickel is expensive, and so, therefore, is this premium wire. The wire will deposit welds that are machine-able, an important consideration when the casting is to be machined after welding. Repairs made with Ni 99 are often single pass welds with high admixture. Even with high admixture, the weld deposit will remain machine-able. It works best on castings with low or medium phosphorous contents

Chemical Composition: acc. AWS 5.15

	Alloy name	Ni% (min)	Cu%	Ti%	Cr%	Mn%	Fe%	C% (max)	Si% (max)	Al% (max)	Others % (max)
AWS	Eni-CI	85	Max 2.5			Max 2.5	Max 8.0	2.0	4.0	1.0	1.0
VZPS	Eni-CI	95	0.1			0.2	3.0	1.0	0.7		

*Or under customer needs

Mechanical properties:

Tensile strength: 276-448 MPa (40-64 psi)

Yield strength: 262-414 MPa (40-64 psi)

Elongation: 3-6%

Dimensions:

Product	Diameter, mm	Length, mm	Packing
Welding wire (MIG)	0.8, 1.0, 1.2, 1.6, 2.0, 2.4, 2.5, 3.2	-	S300/K300
Welding rods (TIG)	2.0, 2.5, 3.2, 4.0, 5.0	915 – 1000	Box
Electrode core wire	2.0, 2.5, 3.20, 3.25, 4.0, 5.0	250, 300, 350, 400, 450, 500	Box

** Or lengths under your needs

Condition of Supply:

Binary Nickel-Iron (Ni-Fe) and Ni based complex welding alloys are supplied in welding rod and wires in standard length or length up to the consumers' request. For normal service conditions, the chemical compositions are available in various Ni contents according to the most of American and European standards.