

CITOFLEX B00 is a basic flux cored wire with excellent mechanical properties, suitable for the welding of heavy sections. Excellent low temperature impact toughness in both the as welded and stress-relieved conditions. Stable arc, spatter-free both in the flat and vertical positions. The weld deposit has a very low hydrogen content and a good crack resistant. Preferably used under mixed gas, however the use of CO₂ for short and spray arc processes is possible.

Basic flux cored wire with excellent mechanical characteristics, high resistance to cracking. Used to weld highly stressed structures. Deposits a low amount of diffusible hydrogen. Used with D.C. (-).

Classification	
EN ISO	17632-A: T 42 5 B C 2 H5
EN ISO	17632-A: T 42 5 B M 2 H5
EN ISO	17632-B: T495T5-1CA-UH5
EN ISO	17632-B: T495T5-1MA-UH5
AWS	A5.20: E70T-5C-JH4
AWS	A5.20: E70T-5M-JH4
AWS	A5.36: E70T5-C1A6-CS1-H4
AWS	A5.36: E70T5-M21A8-CS1-H4

Approvals	Grade
ABS	3YSA H5
BV	SA3YM H5
DNV	IVY40MS H5
GL	4YH5S
LRS	4Y40H5
RINA	3YSH5

CE

Chemical analysis (Typical values in %)

C	Mn	Si	P	S
0.06	1.5	0.6	≤ 0.020	≤ 0.020

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation A5 (%)	Impact Energy ISO - V (J)	
				-50 °C	-60 °C
As Welded	≥ 420	500-640	≥ 26	≥ 60	>47

Gas test: 82% Ar+18% CO₂

Shielding Gas - EN ISO 14175 : C1, C2

Materials

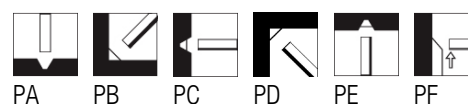
S(P)235-S(P)420, GP240-GP280

Storage

Keep dry and avoid condensation

Current condition and welding position

DC-



Packaging data

Packaging Type	B300
Diam(mm) / weight(kg)	16
1.2	W000281177
1.4	W000281178
1.6	W000281179

CITOFLEX M00 is a high deposition rate metal cored wire. Excellent welding properties with both short and spray arc. Virtually spatter free in the spray-arc range. Particularly suitable for robotic applications. Characteristic features are: good edge wetting, finely rippled welds, little oxide formation on the weld surface making multipass welding possible without inter-run cleaning. The weld profile is easily controllable making this wire well suited for gap bridging and positional welding.

Metal cored wires with high deposit rate and excellent weldability both with short arc and spray arc modes. Use on carbon steel structures that work at low temperature.

Classification	
EN ISO	17632-A: T 46 5 M M 1 H5
EN ISO	17632-B: T555T15-1MA-UH5
AWS	A5.18: E70C-6M H4

Approvals	Grade
ABS	4Y400SA H5
BV	S3YH5
CWB	E491C-6MJ-H4
DNVGL	IV Y46MS(H5)
LRS	4Y40S H5

CE

Chemical analysis (Typical values in %)

C	Mn	Si	P	S
0.04	1.5	0.4	≤ 0.012	≤ 0.02

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation A5 (%)	Impact Energy ISO - V (J)
				-50 °C
As Welded	>460	530-680	≥ 27	>47

Gas test: M21

Shielding Gas - EN ISO 14175 : M21

Materials

S(P)235-S(P)460, GP240-GP280

Storage

Keep dry and avoid condensation

Current condition and welding position

DC+



Packaging data

Packaging Type	B300
Diam(mm) / weight(kg)	16
1.2	W000281055

CITOFLUX M60 is a high quality metal cored wire depositing a fine well shaped weld bead. High deposition rate and excellent weldability. No slag residue, suitable for single and multipass automatic welding. Main applications include mechanical constructions and earth moving equipment.

Diffusible hydrogen 5 ml/100g max.

Classification	
EN ISO	17632-A: T 46 4 M M 1 H5
EN ISO	17632-B: T494T1-1MA-UH5
AWS	A5.18: E 70C-6M H4

Approvals	Grade
ABS	4Y400SA H5
BV	S3YH5
CWB	E491C-6MJ-H4
DNV-GL	IV Y46MS(H5)
LRS	4Y40S H5
TUV/DB	+



Chemical analysis (Typical values in %)

C	Mn	Si	P	S
0.04	1.5	0.4	≤ 0.012	≤ 0.02

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation A5 (%)	Impact Energy ISO - V (J)
				-40 °C
As Welded	>460	530-680	≥ 27	≥ 90

Gas test: M21

Shielding Gas - EN ISO 14175 : M21

Materials

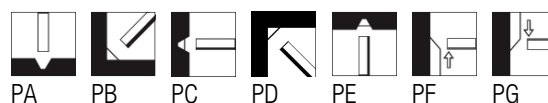
S(P)235-S(P)460, GP240-GP280

Storage

Keep dry and avoid condensation

Current condition and welding position

DC+



Packaging data

Packaging Type Diam(mm) / weight(kg)	B300	DRUM
	16	200
1.2	W000281048	W000281049
1.4		W000281051

All position high efficiency gas shielded metal cored wire with reduced emission of welding fumes. Excellent arc characteristics give outstanding operator appeal. Perfect performance for single pass robotic and high travel speeds. The wire delivers welds with very few silicates, virtually no spatter comparing to standard metal cored wires at same parameters. Very stable mechanical properties (CVN >47J at -30°C) and superior product consistency with optimal alloy control.

NEW

Classification		Approvals	Grade
EN ISO	17632-A: T 46 3 M M 2 H5	ABS	3YSAH5, pending
AWS	A5.18: E70C-6M H4	BV	SA3YMH5, pending
AWS	A5.36: E70C-6M H4	DB	●
		DNV-GL	IIIYMS(H5), pending
		LR	3YSH5, pending
		RINA	3YS, pending
		TUV	+, pending

Chemical analysis (Typical values in %)

C	Mn	Si	P	S
0.05	1.35	0.6	0.015	0.023

All-weld metal Mechanical Properties

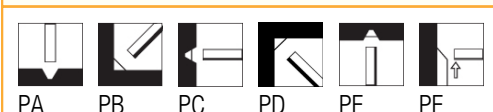
Heat Treatment	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation A5 (%)	Impact Energy ISO - V (J)	
				-20 °C	-30 °C
As Welded	≥ 495	≥ 570	≥ 26	≥ 90	≥ 60

Gas test: 80%Ar+20%CO2

Shielding Gas - EN ISO 14175 : M21

Materials

S(P)235-S(P)460

Storage	Current condition and welding position
Keep dry and avoid condensation	DC+
	

Packaging data

Packaging Type	B300
Diam(mm) / weight(kg)	-
1.2	901300CF

CRISTAL F206 is a high quality metal cored wire with reduced emission of welding fume. It enables a fume emission rate reduction up to 50%. High current carrying capacity, almost spatter-free when welding in the spray-arc range. Good restriking, even with a cold wire tip, thus being suitable for robotic applications. Characteristic features: high deposition rate and welding speed, good side wall fusion, finely rippled welds, without undercut into the base metal, not even on contaminated or corroded metal surfaces. Little formation of silicates on the weld surface, so that multi-pass welds can be made without inter-run cleaning. Due to an easily controllable weld pool in the short-arc range, CRISTAL F 206 is well-suited for root- and positional welding and gap bridging.

Classification		Approvals	Grade
EN ISO	17632-A: T 42 3 M M 1 H5	ABS	3YSA H5
EN ISO	17632-B: T493T15-1MA-UH5	BV	SA3YMH5
AWS	A5.18: E70C-6M H4	DNVGL	III YMS(H5)
		LRS	3YS H5
		TÜV/DB	+



Chemical analysis (Typical values in %)

C	Mn	Si	P	S
0.05	1.35	0.6	≤ 0.015	≤ 0.023

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation A5 (%)	Impact Energy ISO - V (J)
				-30 °C
As Welded	≥ 420	500-610	≥ 26	≥ 60

Gas test: M21

Shielding Gas - EN ISO 14175 : M21

Materials

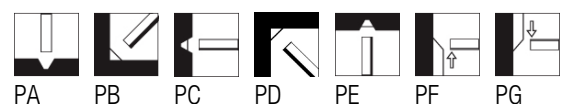
S(P)235-S(P)420

Storage

Keep dry and avoid condensation

Current condition and welding position

DC+



Packaging data

Packaging Type	B300	DRUM
Diam(mm) / weight(kg)	16	200
1.2	W000262195	W001262197
1.4		W001262198

CITOFLEX R00C is a folded rutile flux-cored wire for gas-shielded metal arc welding of unalloyed steels for operating temperatures from -30°C up to +450°C in all welding positions. The weld pool is easily controllable with outstanding welding properties. The enhanced filling results in increased current carrying capacity and hence deposition rate, thus essentially increasing welding speed, leading to savings of time and costs. Low spatter loss and easy slag removal result in smooth and finely rippled welds without undercut. Can be used in manual and fully-mechanised processes, very well suited for use on ceramic backing. To be used under C1 and M21 gases.

Classification

EN ISO	17632-A: T 42 3 P C 1 H5/T 46 2 P M 2 H5
AWS	A5.20: E71T-1/9C-H4 / E71T-1/9M-H4

Approvals

Approvals	Grade
ABS	3Y400SAH5 (M21)
ABS	3YSA H5 (CO2)
BV	SA3Y40MH5 (M21)
BV	SA3YM H5 (C1)
DNVGL	IIY40H5 (C1)
DNVGL	IIY40MSH5S (M21)
LRS	3Y40SH5 (M21)

Approvals

Approvals	Grade
LRS	3YSH5 (C1)
PRS	3Y40SH5 (C1)
PRS	3YSH5 (C1)
RINA	3Y40SMH5 (M21)
RINA	3YSH5 (C1)
RMRS	3Y40MSH5 (M21)
RMRS	3YSH5 (C1)

CE

Chemical analysis (Typical values in %)

C	Mn	Si	P	S
0.05	1.3	0.4	≤ 0.015	≤ 0.015

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation A5 (%)	Impact Energy ISO - V (J)	
				-20 °C	-30 °C
As Welded (*)	min 460	530-680	≥ 26	≥ 80	
As Welded (**)	min 420	500-640	≥ 25		≥ 70

Gas test: (*) M21, (**) C1

Shielding Gas - EN ISO 14175 : C1, M21

Materials

Oteluri pentru constructii navale tip A,B,D,E,AH32 - EH36

X42 si X65

S(P)235-S(P)460, GP240-GP280

Storage

Keep dry and avoid condensation

Current condition and welding position

DC+



Packaging data

Packaging Type	B300
Diam(mm) / weight(kg)	16
1.2	W000382937
1.6	W000281144

CITOFLEX R00 is rutile flux-cored wire for gas-shielded metal arc welding of unalloyed steels for operating temperatures from -30°C up to +450°C in all welding positions. The weld pool is easily controllable with outstanding welding properties. The enhanced filling results in increased current carrying capacity and hence deposition rate, thus essentially increasing welding speed, leading to savings of time and costs. Low spatter loss and easy slag removal result in smooth and finely rippled welds without undercut. Can be used in manual and fully-mechanised processes, very well suited for use on ceramic backing. Preferably used under mixed gas. The use of CO₂ is possible.

Classification	
EN ISO	17632-A: T 42 2 P C 1 H5
EN ISO	17632-A: T 42 3 P M 1 H5
EN ISO	17632-B: T492T1-1CA-UH5
EN ISO	17632-B: T493T1-1MA-UH5
AWS	A5.20: E71T-1C-H4
AWS	A5.20: E71T-1M-JH4

Approvals	Grade
ABS	3Y400SA,3YSA H5
BV	SA3Y40M,SA3YM H5
CRS	3YH5S
DNVGL	III Y40MS,3Y40 H5
LRS	3Y40S,3YS H5
PRS	3Y40S,3YS H5
RINA	3Y40S,3YS H5
RMRS	3Y40MS,3YS H5

CE

Chemical analysis (Typical values in %)

C	Mn	Si	P	S
0.05	1.47	0.5	≤0.015	≤0.015

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation A5 (%)	Impact Energy ISO - V (J)	
				-20 °C	-30 °C
As Welded	min 420	500-640	≥ 26	≥ 80	≥ 50

Gas test: 82% Ar+18% CO₂

Shielding Gas - EN ISO 14175 : C1, M21

Materials

Shipbuilding steels A,B,D,E,AH32 - EH36

S(P)235-S(P)420, GP240-GP280

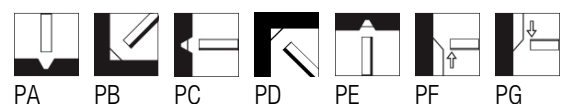
X42 - X65

Storage

Keep dry and avoid condensation

Current condition and welding position

DC+



Packaging data

Packaging Type	B300
Diam(mm) / weight(kg)	16
1.0	W000281145
1.2	W000281147

CITOFLUX R71 is quality rutile flux-cored wire for gas-shielded metal arc welding of unalloyed steels in all welding positions. Thanks to an innovative flux formulation, the weld pool is easily controllable with outstanding welding properties and optimized wettability. The enhanced filling results in increased current carrying capacity and augmented deposition rate. Higher welding speed allows savings in time and costs. Characterized by very low spatter presence and easy slag removal the bead is smooth and finely rippled without undercut. Low fume emission rate, deep penetration and outstanding weldability make this wire an ideal solution for shipbuilding applications. It can be used in manual and fully-mechanised processes, very well suited for use on ceramic backing and with long liner. It can be used under CO₂.

Classification

EN ISO	17632-A: T 42 2 P C 1 H10
EN ISO	17632-A: T 46 2 P M 1 H10
AWS	A5.20: E71T1-1/9C H8

Approvals

Approvals	Grade
ABS	3Y400SA H5 (M21)
ABS	3YSA H5 (C1)
BV	SA3YM H5 (C1)
BV	SAY40M H5 (M21)
CRS	3YH5 H5 (C1)
DNVGL	3Y40 (C1)
DNVGL	3Y40MS H5 (M21)
LRS	3Y40S H5 (M21)

Approvals

Approvals	Grade
LRS	3YS (C1)
PRS	3Y40S (M21)
PRS	3YS H5 (C1)
RINA	3Y40S (M21)
RINA	3YS H5 (C1)
RMRS	3Y40MS (M21)
RMRS	3YS H5 (C1)



Chemical analysis (Typical values in %)

C	Mn	Si	P	S
0.05	1.3	0.40	≤0.015	≤0.015

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation	Impact Energy ISO - V (J)
				-20 °C
As Welded	≥ 530	≥ 590	25	> 47

Gas test: CO₂

Shielding Gas - EN ISO 14175 : C1, M21

Materials

S(P)235-S(P)460, GP240-GP280

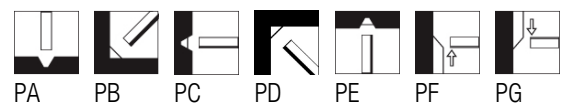
Shipbuilding steels A,B,D,E,AH32 - EH36

Storage

Keep dry and avoid condensation

Current condition and welding position

DC+



CITOFLEX R71



FCAW/MCAW Cored Wires
C-Mn and low-alloy steels

Packaging data

Packaging Type	B300
Diam(mm) / weight(kg)	16
1.2	W000386374

CITOFLEX R111 is a T 42 2 1Ni R C 3 H5 / T 42 2 1Ni R M 3 H10 folded type MAG rutile flux cored wire, depositing C-0.8Mn0.8Ni weld metal. Suitable for welding with CO₂ and Ar-CO₂ mixed shielding gases.

CITOFLEX R111 is designed for welding single and multi-layer butt, negligible spatter loss, easy slag removal, smooth, finely rippled weld beads without undercutting into the base metal.

CITOFLEX R111 with a slow-freezing slag and outstanding welding properties in downhand and fillet positions has an excellent weld appearance to improve fatigue resistance. Typical application is the heavy transport vehicles and road construction machinery.

Classification

EN ISO	17632-A: T 42 2 1Ni R C 3 H5
EN ISO	17632-A: T 42 2 1Ni R M 3 H10
AWS	A5.36: E70T1-C1A2-K6-H4
AWS	A5.36: E70T1-M21A0-K6-H8

Chemical analysis (Typical values in %)

C	Mn	Si	Ni
0.04	0.8	0.4	0.8

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation A5 (%)	Impact Energy ISO - V (J)	
				-20 °C	-30 °C
As Welded (*)	≥ 420	500-620	≥ 23	≥ 70	
As Welded (**)	≥ 420	500-620	≥ 23	≥ 80	≥ 60

Gas test: (*) 82% Ar+18% CO₂, (**) 100% CO₂

Shielding Gas - EN ISO 14175 : C1, M21

Materials

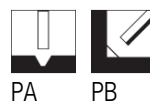
S(P)235-S(P)420, GP240-GP280

Storage

Keep dry and avoid condensation

Current condition and welding position

DC+



PA PB

CRISTAL F100 is a rutile cored wire which generates less welding fume than similar standard products. It enables a fume emission rate reduction of up to 30% (Standard shielding gas C1). The enhanced filling degree results in increased current carrying capacity and deposition rate, thus increasing welding speed and leading to a saving of time and costs. Low spatter loss and easy slag removal produce smooth and finely rippled welds without undercut into the base metal.

Classification	
EN ISO	17632-A: T 42 2 P C 1 H5
AWS	A5.20: E71T-1 H4

Approvals	Grade
ABS	3YSA H5
BV	3YM H5
DNV	IIIY40MS H5
GL	3YH5S
LRS	3S-3Y H5



Chemical analysis (Typical values in %)

C	Mn	Si	P	S
0.03	1.5	0.6	≤0.018	≤0.018

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation A5 (%)	Impact Energy ISO - V (J)
				-20 °C
As Welded	≥ 420	510-610	≥ 24	≥ 50

Gas test: 100% CO₂

Shielding Gas - EN ISO 14175 : C1

Materials

Shipbuilding steels A,B,D,E,AH32 to EH36

S(P)235-S(P)460, GP240-GP280

Storage

Keep dry and avoid condensation

Current condition and welding position

DC+



Packaging data

Packaging Type	B300	S200
Diam(mm) / weight(kg)	16.0	5.0
	W000262200	W000262199