KOBELCO is a leading manufacturer offering “Welding Solution” which provides with combination of high-quality welding consumables and technical expertise. Since manufacturing plant of covered electrode was established in Thailand in 1968, KOBELCO welding consumable has been recognized No.1 position in South East Asia. Meanwhile, covered electrode RB-26, LB-52 and LB-52-18 are now industrial benchmark products in the region. Our reputation is recognized by its reliable and consistent quality achieved by stringent quality control system and Japanese manufacturing philosophy “Monodukuri”. The sprit is shared among all 13 manufacturing bases in the world. Apart from RB-26, LB-52 and LB-52-18, flux cored wire “DW” is one of the most prominent brands in heavy fabrication such as shipbuilding and offshore structure which requires high quality and productivity.

Consumable Selection Guide

Base Metal Class	Steel Grade ASTM, EN ISO	LB (Covered Electrode)	DW (Flux Cored Wire) 0°C ~ -20°C	DW (Flux Cored Wire) -40°C
Mild Steel TS: 490MPa YS: 355MPa API X52, X56	A516 Gr. 70 Al06 Gr. B A572 Gr. 50	LB-52, LB-52U LB-52-18 KOBE-7018-1	**DW-71T1** 47J minimum at 0°C 27J minimum at -20°C	**DW-100KS**
TS: 550MPa YS: 460MPa API X60, X65	S450 J0 S460N S420 ML	LB-8018 LB-55U	**DW-55SH** (~ -60°C) **DW-55L** (~ -60°C)	

Manufacturing and Marketing bases in ASEAN and South Asia region

Distributor by:

For ENQUIRY, please contact:

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Plot 502 Jalan Perusahaan Baru,
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500 Soi 1 Bangpoo Industrial Estate, Moo 4,
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Samutprakan 10280, Thailand.
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KOBELCO Global Website

YouTube
“How to handle Spool Wire”

KOBELCO

FAMILIARC™

FLUX CORED WIRE FOR ALL POSITIONAL WELDING

DW-71T1

Rutile type flux cored wire designed to weld mild steel and 490MPa high tensile steel using 100% CO_2 shielding gas.

- **VERSATILE**
- **CONSISTENT**
- **COMFORTABLE**
- **SMOOTH**

FAMILIARC™ DW-71T1 FLUX CORED WIRE

Applicable Specification

AWS A5.20 E71T-1C, ASME SFA-5.20 E71T-1C, EN ISO 17632-A: T42 0 P C 1 H10

Outstanding Features

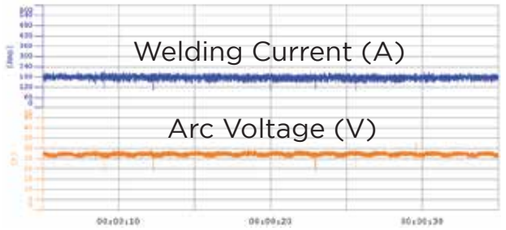
- **Versatile** flux cored wire designed for all positional welding
- **Consistent** arc formation in wide current range 120-280A
- Flat weld bead is produced with easy slag removal and **smooth** wetting onto the plate
- Fast freezing slag formula ensures **comfortable** welding in fillet, butt & pipe joint
- Dedicated formula ensures less welding defect and **reliable** mechanical properties with low diffusible hydrogen
- Advantage of non-baked bright finish wire surface ensures trouble-free wire feeding and extended life of inlet conduit liner
- Aluminuim package keeps wire from picking up moisture during storage

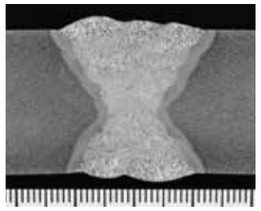
Bright Finishing Wire Surface

Smooth wire feeding is the key for a successful welding. Advanced metal lubrication technology produces “Bright finish” wire surface. The advantage of “Bright finish” wire is less friction along inlet conduit liner tube in wire feeding which leads to wire clogging frequently observed in baked wire. It also contributes to extend life cycle of inlet conduit liner tube.

Layer wound wire with constant cast and minimal helix avoids wavy weld bead. It is best suited for automated welding using carriage or robot as well as semi-auto process.

2F, 180A - 27.5V





Welding Condition:
Vertical up, 3G
180A ~ 26V

Typical Properties of Weld Metal

**Chemical composition of all weld metal (mass %)*

	C	Si	Mn	P	S
DW-71T1	0.05	0.50	1.47	0.009	0.012
Specification	≦ 0.12	≦ 0.90	≦ 1.75	≦ 0.030	≦ 0.030

**Mechanical properties of all weld metal*

	0.2% YS (MPa)	TS (MPa)	El (%)	CVN (J) -20°C
DW-71T1	511	573	29	Avg.108 (115, 106, 102)
Specification	≧ 400	483-655	≧ 22	≧ 27 at -20°C

**Diffusible hydrogen Contents (ml/100g)*

Ampere	Avg.
230A	3.8
270A	4.9

Test method: *Gas Chromatograpy method (AWS A4.3)*
Wire stick out: *25mm, Welding speed: 350mm/min.*
Shielding gas: *100% CO2 (25l/min.)*

Application

▶ **Structural Steel**

▶ **Tank and Vessel**

▶ **Ship Building**

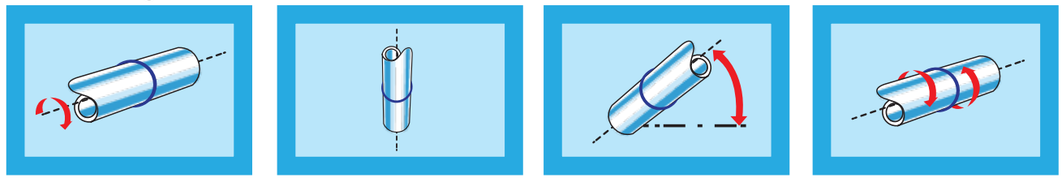
▶ **Pipe Works**

Applicable Power Source

Conventional Thyristor or Inverter type MIG/MAG power source is suitable with CV (Constant Voltage) mode.

Applicable Welding Position

**Pipe Welding Position*

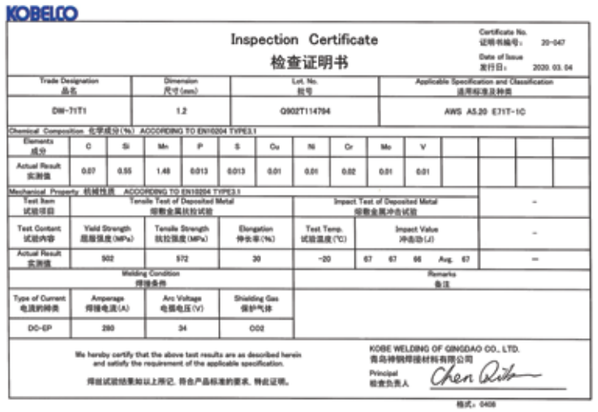


Wire Size and Applicable Welding Parameter

Wire diameter (mm)	Flat	Horizontal	Vertical Up Over Head
1.2	140 ~ 280A	140 ~ 280A	120 ~ 220A

In FCAW with CV power source, welding current fluctuates by CTWD (Contact Tip to Work Distance) at same wire feeding rate. The longer CTWD, the lower current is generated. CTWD should be kept constant during welding in order to attain a consistent result, especially shorter CTWD at 15-20mm is recommended for lower current range below 200A to achieve stable arc.

Certified Test Report



KOBELCO

Inspection Certificate
检查证明书

Certificate No. 证明书编号: 20-047
Date of Issue 发行日: 2020. 03. 04

Trade Designation 品名	Dimension 尺寸(mm)	Lot. No. 批号	Applicable Specification and Classification 适用标准及种类
DW-71T1	1.2	O902T114794	AWS A5.20 E71T-1C

Chemical Composition 化学成分(%) ACCORDING TO EN10204 TYPE3.1

Elements 成分	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V				
Actual Result 实测值	0.07	0.55	1.48	0.013	0.013	0.01	0.01	0.02	0.01	0.01				

Mechanical Property 机械性质 ACCORDING TO EN10204 TYPE3.1

Test Item 试验项目	Tensile Test of Deposited Metal 熔敷金属拉拉试验			Impact Test of Deposited Metal 熔敷金属冲击试验				-
Test Content 试验内容	Yield Strength 屈服强度(MPa)	Tensile Strength 抗拉强度(MPa)	Elongation 伸长率(%)	Test Temp. 试验温度(℃)	Impact Value 冲击功(J)			-
Actual Result 实测值	502	572	30	-20	67	67	66 Avg. 67	--

Welding Condition 焊接条件				Remarks 备注
Type of Current 电流的种类	Amperage 焊接电流(A)	Arc Voltage 电弧电压(V)	Shielding Gas 保护气体	
DC-EP	280	34	CO2	

We hereby certify that the above test results are as described herein and satisfy the requirement of the applicable specification.
焊丝试验结果如以上所记, 符合产品标准的要求, 特此证明。

KOBE WELDING OF QINGDAO CO., LTD.
青岛神钢焊接材料有限公司
Principal 检查负责人 Chen Qiu

格式: 0408

Chemical composition, tensile test result and impact test result of deposited metal are reported in Inspection Certificate (IC) for every lot complying to EN10204 TYPE 3.1.

Storage Guidance

Keep the wire in original packaging in the atmosphere free from water, dew or moisture. Once wire is partially used, spool should be dismounted from wire feeder and stored in dried condition to prevent moisture pick-up. Wire surface should be well covered & protected from contamination such as dirt or dust.