

World Best
The Auto Part Company
Dong-A Metal co.

주식회사 동아금속

QUALITY STANDARDS
ISO 14001:2004



DGM[®] (주) 동아금속
DONG-A METAL CO.,LTD
www.dong-a-mt.com

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More Competitive, More Innovative

www.dong-a-mt.com

Greeting

Since 1987, our company has been running only one way for automobile part industry such as spring-clamps and high-tech stamping parts by which we now could become a leading Korean supplier for many world customers for many years.

PPM (Particle Per Million) "0" is the first goal we are always trying to for which engineers and all members here have been doing their best from design to systemic production by our own technologies & facilities under good management systems.

Giving competitive price and good service to our customers will surely be the second goal we have to keep on from current reputation. And very good price & service, we are sure, could draw your keen interest to be considering a business opportunity mutually for finally making a real business under good relationship.

The only thing we want to say you with taking this chance is that we, DGM, want to be one of your world parts supplier or business partner, and would tell you showing our best services as possible as we can during the contracted period.

CEO **Han-II, Chung**

Global Leader Dong-A We promise to make the best only!

Company History

Year.Month	Description
1987.11	Established in Daegu, Korea
1998.01	Incorporation of going business
2002.03	Formed a partnership with BORG WARNER as a global supplier
2003.10	Registration as tier 1 supplier of Hyundai & Kia Motors
2005.12	Relocation to Waegwan plant (9,900 m ²)
2006.12	Registration as tier 1 supplier of GM Korea
2007.03	Formed a partnership with ZF BORG (Germany) as a global supplier
2008.03	Registration as tier 1 supplier of Autoliv (Delphi global)
2008.05	Awarded the prime minister citation on entrepreneur's mass
2009.03	Formed a partnership with U.S. ZF & NA Autoliv as a global supplier
2011.06	Registration as tier 1 supplier of Sam-song
2012.01	Expansion of the head-office plant (add 4,300 m ²)

Branch office_ 1. AWT(Germany) 2. Mescot(USA) 3. Jinxi(China)

Customer Area_ 1. Germany 2. USA 3. Slovakia 4. China 5. India 6. Brasil 7. Mexico



Main Customers

Domestic



Overseas



We make reliable quality customer-centered products



Stepless Clamps



Stainless Clamps



Hose Clamps



Welding Parts



Deep drawing Parts



Seat belt & Airbag Parts

Stainless Clamp

▣ Air Intake Hose Clamp



Band Width (mm)	Clamping Diameter Ø(mm)	Recommended tightening torque(Nm)	Fracture torque (Nm)	Band thickness (mm)
9	40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100, 105, 110	3.0~3.9	5.0	0.7

▣ Hose Clamp for Intercooler in Turbocharger



Band Width (mm)	Clamping Diameter Ø(mm)	Recommended tightening torque(Nm)	Fracture torque (Nm)	Band thickness (mm)
12	50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100	5.0~7.0	9.0	0.65

Technical Feature : Torque Control Cap

DGM Intercooler Hose Clamps have a torque control cap which can restrict initial tightening torque limits. Which makes workers check whether the clamps are assembled with adequate torque. This feature improve product quality and reduce fracture defective.

▣ Commercial Vehicle Hose Clamp



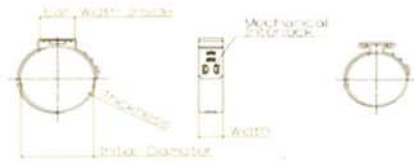
Band Width (mm)	Clamping Diameter Ø(mm)	Recommended tightening torque(Nm)	Fracture torque (Nm)	Band thickness (mm)
14	79, 92, 105, 117, 130, 143, 149, 156, 168, 175, 205, 219, 232, 244, 270	8.5 ~ 11.8	14 ~ 26	0.7

▣ Exhaust Clamp



Band Width (mm)	Clamping Diameter Ø(mm)	Recommended tightening torque(Nm)	Fracture torque (Nm)	Band thickness (mm)
18 (80° V Shaped)	53.5	20.0	30.0	1.5

Stepless Ear Clamp



$$\text{Max. Diameter Reduction} = \frac{\text{Ear Width inside}}{\pi}$$

Heavy weight Series



Size Range Ø(mm)	Width (mm)	Initial Diameter Ø(mm)	Ear Width Inside (mm)	Thickness (mm)
MIN 9,2	5,0	12,0	7,0	0,6
MIN 10,3	7,0	12,3	8,0	0,6
MIN 13,7	7,0	16,2	8,0	0,6
MIN 16,6	7,0	19,8	10,0	0,6
MIN 18,3	7,0	20,8	10,0	0,6
MIN 19,4	9,0	22,6	10,0	0,8
MIN 20,3	9,0	22,8	10,0	0,8
MIN 26,0	9,0	28,6	9,9	0,8
MIN 33,4	9,0	35,0	8,4	0,8
MIN 33,5	10,0	36,8	10,0	0,8
MIN 36,0	9,0	38,5	9,9	0,8
MIN 36,6	10,0	39,1	10,0	0,8
MIN 40,8	9,0	44,0	9,9	0,8
MIN 45,8	9,0	48,0	10,0	0,8
MIN 51,3	9,0	53,5	10,0	0,8
MIN 66,8	9,0	69,0	10,0	0,8
MIN 73,8	9,0	76,0	10,0	0,8

Light weight Series (One Ear Clamp)



Size Range Ø(mm)	Width (mm)	Initial Diameter Ø(mm)	Ear Width Inside (mm)	Thickness (mm)
MIN 16,2	7,0	18,4	10,0	0,6
MIN 17,8	7,0	20,0	10,0	0,6
MIN 20,3	7,0	22,5	10,0	0,6
MIN 21,9	7,0	24,1	10,0	0,6
MIN 24,8	7,0	27,0	10,0	0,6
MIN 27,6	7,0	29,8	10,0	0,6
MIN 29,8	7,0	32,0	10,0	0,6

Hose Clamp



Heavy weight Series

Initial Diameter Ø(mm)	Full Opened Diameter Ø(mm)	Width (mm)	Thickness (mm)	Clamping Force (N)
MAX 13,9 (15)	MIN 16,5	12,0	1,0	MIN 199
MAX 17,8 (19)	MIN 20,2	12,0	1,4	MIN 200
MAX 19,4 (21)	MIN 22,5	12,0	1,4	MIN 200
MAX 25,2 (27)	MIN 29,2	12,0	1,8	MIN 368
MAX 37,2 (42)	MIN 43,7	12,0	2,3	MIN 500
MAX 38,2 (43)	MIN 44,9	12,0	2,3	MIN 500

Hose Clamp



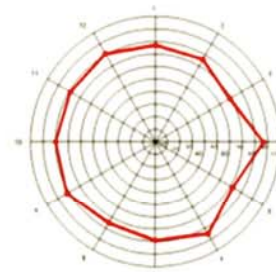
Standard Series

Initial Diameter Ø(mm)	Full Opened Diameter Ø(mm)	Width (mm)	Thickness (mm)	Initial Diameter Ø(mm)	Full Opened Diameter Ø(mm)	Width (mm)	Thickness (mm)
5,8±0,2	MIN7,0	6,0	0,6	20,8±0,3	MIN26,0	12,0	1,0
6,8±0,2	MIN8,3	6,0	0,4	21,0±0,3	MIN25,4	12,0	1,0
7,8±0,2	MIN9,5	6,0	0,6	21,7±0,3	MIN26,0	15,0	1,2
8,6±0,2	MIN10,6	8,0	0,7	22,3±0,3	MIN25,8	15,0	1,4
9,0±0,4	MIN11,5	8,0	0,8	23,0±0,4	MIN26,8	15,0	1,4
10,0±0,2	MIN12,2	8,0	0,6	23,7±0,3	MIN29,0	15,0	1,2
10,7±0,4	MIN12,8	8,0	0,9	24,0±0,4	MIN29,0	12,0	1,2
11,0±0,2	MIN13,3	8,0	0,7	25,0±0,4	MIN30,0	10,0	1,3
11,5±0,3	MIN13,5	15,0	0,8	25,2±0,3	MIN29,8	15,0	1,4
11,8±0,4	MIN13,8	8,0	0,9	25,8±0,3	MIN30,0	10,0	1,3
12,0±0,3,-0,2	MIN15,0	10,0	0,8	26,0±0,4	MIN32,0	12,0	1,2
MAX 12,2	MIN15,2	14,0	0,9	26,6±0,4	MIN31,0	15,0	1,4
12,5±0,4	MIN14,5	8,0	0,9	28,0±0,4	MIN35,0	12,0	1,2
12,8±0,2	MIN 15,0	8,0	0,9	28,5±0,4	MIN33,8	15,0	1,3
13,0±0,3	MIN14,6	8,0	0,8	30,0±0,4	MIN37,0	12,0	1,2
13,3±0,2	MIN 16,1	12,0	0,9	31,2±0,5	MIN37,5	15,0	1,4
13,8±0,2	MIN16,8	15,0	0,8	32,0±0,4	MIN39,0	12,0	1,2
14,2±0,4	MIN16,5	8,0	0,9	33,8±0,5	MIN40,0	18,0	1,5
14,4±0,3	MIN16,1	10,0	0,9	MAX 34,0	MIN42,0	18,0	1,5
14,8±0,2	MIN17,7	10,0	1,0		MIN42,5	12,0	1,7
15,2 ±0,8	MIN19,0	16,0	1,1	MAX 35,5	MIN43,0	18,0	1,5
15,5±0,2	MIN18,2	12,0	1,0	MAX 36,0	MIN44,5	18,0	2,0
15,8±0,5	MIN19,5	15,0	1,2	37,0±0,5	MIN45,0	18,0	1,6
MAX 16,0	MIN18,5	16,0	1,1	MAX 37,5	MIN46,5	12,0	0,9
16,2±0,2	MIN19,7	12,0	1,2	MIN 46,5	MIN 46,5	18,0	2,0
16,7±0,3	MIN19,5	18,0	1,1	MAX 38,0	MIN47,0	15,0	1,8
17,0±0,3	MIN20,1	12,0	0,9	38,5±0,5	MIN48,0	18,0	1,6
17,2±0,3	MIN21,0	12,0	1,0	MAX 40	MIN46,2	18,0	2,0
MAX 17,5	MIN21,0	12,0	1,0	41,0±0,4	MIN48,0	15,0	2,0
17,8±0,3	MIN21,8	12,0	1,0	41,5±0,5	MIN49,9	17,0	1,8
MAX 18,5	MIN22,0	12,0	1,2	43,0±0,5	MIN52,1	18,0	1,8
18,7±0,3	MIN21,5	12,0	1,2	MAX 43,5	MIN53,5	15,0	2,0
19,0±0,3	MIN24,0	15,0	1,2	44,8±0,5	MIN54,2	18,0	1,8
19,7±0,3	MIN23,0	12,0	1,0	MAX 52,0	MIN65,0	15,0	2,5
20,0±0,3	MIN24,0	12,0	1,0	55,0±0,7	MIN67,8	20,0	2,0
20,2±0,3	MIN23,0	12,0	1,2	57,0±0,8	MIN69,0	15,0	1,6

There are lots of hose clamps are not marked on upper table. If you want to know those clamps, please contact us.

Product Evaluation Test

12-Point Force Test



12-Point Force Test is one of DGM stainless clamp's product evaluation test. 12-Point Tester measures 12-direction (like clock hands) clamping force of stainless clamps. This test makes it possible to enhance reliability of the clamps by simulating conditions on applying in real assembly part.