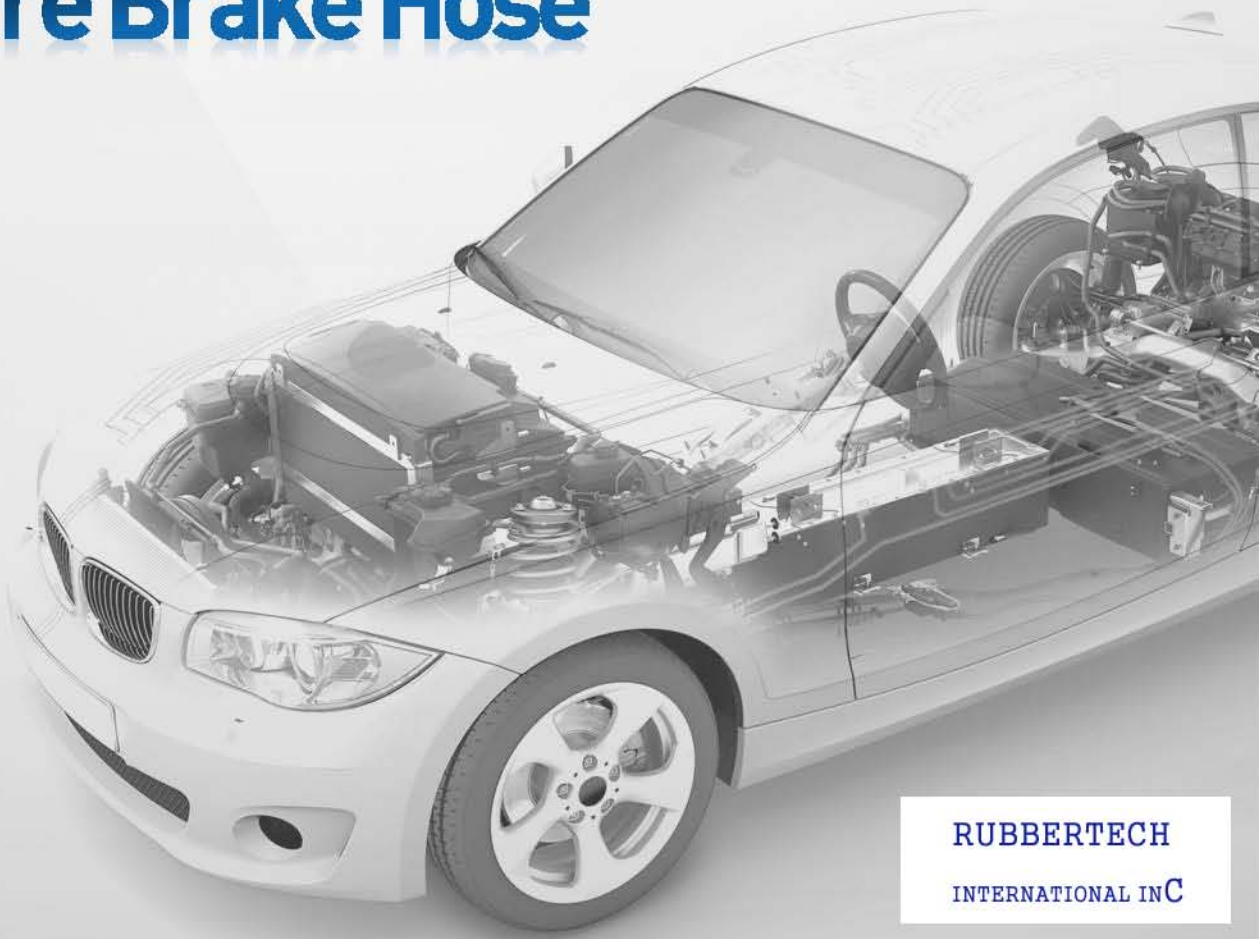
Automotive Hose

Technical Report

• High Pressure Brake Hose



RUBBERTECH

INTERNATIONAL INC

Introduction of High Pressure Hose

Brake hose (Details and Model)

Hose details & model

ITEM		BRAKE HOSE
Size		Ø3.2×Ø10.5
Inner Rubber	①	EPDM
1T/B	②	PVA (24Cr)
Middle Rubber	③	NR
2T/B	④	PVA (24Cr)
Outer Rubber	⑤	EPDM
Remarks		High Durability High Expansion

MAKER	CAR MODEL Production
GM	Cruze / Zafira / Aveo / Forenza / Tosca, etc.
HYUNDAI	Equus / Genesis / Grandeur TG / i10 / i20 / Avante MD, etc.
KIA	K5 / K7 / Sorento R / Morning / Soul / Mohave, etc.
BMW	Approved
CHRYSLER	Approved

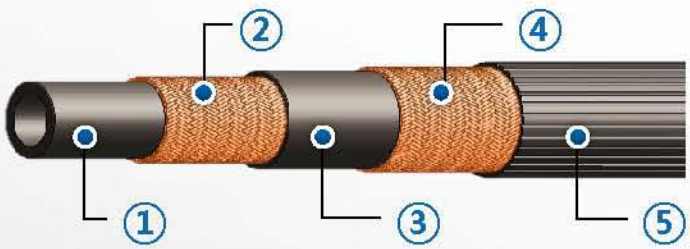
※ DOT approved and meet SAE J1401 & FMVSS106 standards and OEM specification.

Introduction of High Pressure Hose

Brake hose (Structure and Test Report)

RUBBERTECH

Hose structure & packing



① EPDM

② VINYLON (20Cr)

③ IIR + EPDM

④ VINYLON (24Cr)

⑤ EPDM

TEST CERTIFICATE

TEST ITEM & CONDITION		UNIT	Sample Size	TEST RESULT	SPECIFICATION
100% Pressure Test 20.7MPa~24.8MPa×10~25sec			All	No Leak	No Leak
Constriction Test 2.03mm×76mm Constriction Gauge Drop			All	Pass	Pass
Volumetric Expansion Test	6.9MPa	cc/ft	4EA	0.13/0.13/0.14/0.13	0.33 MAX
	10.3MPa	cc/ft	4EA	0.17/0.17/0.18/0.18	0.42 MAX
Burst Test Pressure rate : 172.5±69MPa/min	Pressure Test 27.6MPa×2min		4EA	No Leak	No Leak
	Burst Strength	MPa	4EA	88.2/87.5/88.6/86.9	49.0 MIN
Whip Test 1.55~1.72MPa×800RPM×35hr			4EA	No Leak	No Leak
Water Absorption Test 85℃×70~72hr	Burst Strength	MPa	4EA	88.5/89.1/88.2/87.2	49.0 MIN
	Whip Test		4EA	No Leak	No Leak
Cold Bend Test -45℃~-48℃×70~72hr×76mm Mandrel Bending			1EA	No Crack	No Crack
Brake Fluid Compatibility 120℃×70~72hr	Pressure Test 27.6MPa×2min		4EA	No Leak	No Leak
	Constriction Test		4EA	Pass	Pass
	Burst Strength	MPa	4EA	91.9/92.3/90.5/91.3	34.5 MIN
Ozone Test 100pphm×40℃×70~72hr×O.D 8Times Mandrel Bending			1EA	No Crack	No Crack
Hot Impulse Test Pressure : 0 ↔ 11.0MPa Ambient Temp : 143±3℃ Pressure Cycle : 30 CPH Cycle Time : 150Cyde	Appearance		4EA	No Leak	No Leak
	Pressure Test 27.6MPa×2min		4EA	No Leak	No Leak
	Burst Strength	MPa	4EA	81.5/82.3/83.1/82.7	34.5 MIN
Dynamic Ozone Test 100pphm×40℃×76mm×0.3Hz×48hr			4EA	No Crack	No Crack

* Test Method : FMVSS106, SAE J1401
* Specification Code : FMVSS106, SAE J1401

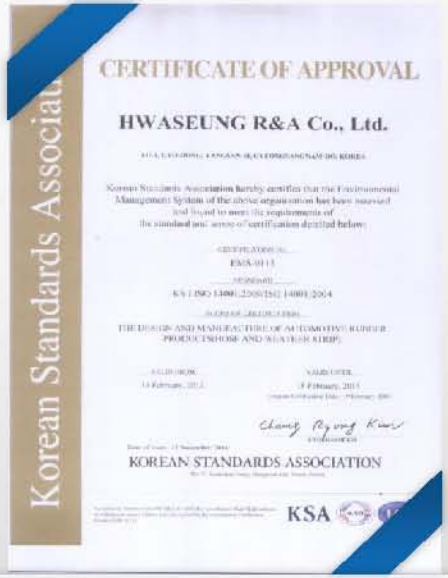
Engineering Capability & Support

Certifications (Korea)

EQUIPMENT	SETUP PLAN	REMARKS
ISO/TS 16949:2009	12. 05. 05	KSA (Korean Standards Association)
ISO 14001:2009	12. 02. 19	KSA (Korean Standards Association)



ISO/TS 16949



ISO14001