

Motorsport & Tuning

Delivery Program 2007



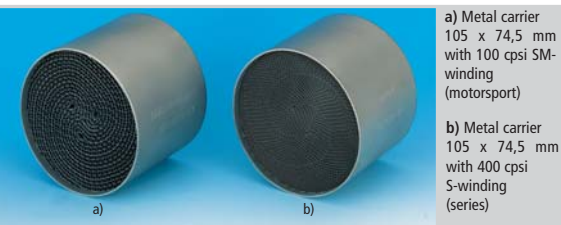
Motorsport Catalysts

Catalytic converter technology HJS offers a universal non-regulated catalytic converter system for motor sport. For the different cubic capacity classes of racing cars, a corresponding catalytic converter with a specifically adapted catalytic converter volume has been created. Experience in the most demanding racing series like DTM, STW, DTC, Formula 3 and the rally world Championship show that there is no significant loss of engine performance by using the HJS high performance catalytic converter system.



HJS high performance catalytic converter 1054-60 with mounted connecting parts including lambda probe.

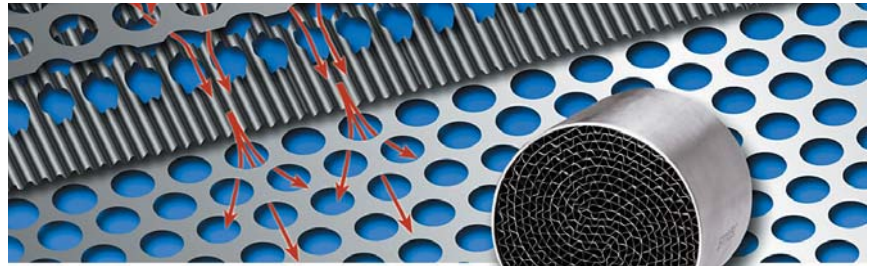
Engine Performance Output The approval of the TÜV Bayern for the catalytic converter concept and further tests have shown that HJS high performance catalytic converters do not produce any loss of engine performance (measurements according to DIN 70020) and keep within the exhaust gas regulations.



a) Metal carrier 105 x 74,5 mm with 100 cpsi SM-winding (motorsport)
b) Metal carrier 105 x 74,5 mm with 400 cpsi S-winding (series)

The Technical Concept The use of metal supports with 100 cells per inch² (cps) and the excellent construction of the cones with regard to the flow have the advantage that the exhaust back pressure is not increased, avoiding a reduction of the engine performance. The optimum supports guarantee long duration of life. The intermediate layer (wash-coat) is resistant to high temperatures and guarantees the high stability that is necessary in motorsports.

New generation of HJS motorsport catalysts with FIA homologation



The new generation of HJS high performance catalysts are characterized by 30 % less weight in relation to the so far used parts. We have reduced the backpressure about another 10%, the exhaust gas pollution reduction is optimised.

The thickness of the foil (0,11 mm) persists unchanged.

For the catalysts with the new developed foil we can guarantee the same durability in relation to our so far offered products.

Race & Rally cars: Following the report issued by the Bavarian Technical Inspectorate (TÜV Bayern), our catalytic converter system 1054 may be registered for all vehicles that are licensed without catalytic converter. Similarly, this report allows the registration of catalytic converters of other cubic capacity classes.

Technical Information: The maximum cubic capacity is relevant when choosing the right catalytic converter. In certain circumstances, it may be preferential to use a catalytic converter from the next highest cubic capacity class. Within a cubic capacity class, it is possible to choose between different exhaust pipe diameters. All HJS catalytic converters come complete with homologation sheets, approvals if applicable, and with all necessary mounting kits.

FIA Homologations-No.	HJS Part-No.	Outside Diameter of Exhaust Pipe	Total Length of Catalytic Converter	Outside Diameter of Catalytic Converter	Cubic Capacity in ccm
		in mm	in mm	in mm	
		R	L	D	
0903-60/55	90 95 0934	60/55	300	93	up to 1300 (above 2500*)
0903-50	90 95 0932	50			
1052-60/55	90 95 1524	60/55	300	108	up to 1600 (above 2500*)
1054-70	90 95 1546	70	350	108	up to 2000
1054-60/55	90 95 1544	60/55			
1056-70	90 95 1566	70	400	108	up to 2500
1056-60	90 95 1564	60			
F3 1012/10	90 95 0573	70/80	250	108	Formula 3
F3 1012/10 PE	90 95 0578	70/80	250	108	Formula 3
RC 1090/10	90 95 0056	50	261	93	Rallye, Cross 1,4
WRC 1112/10	90 95 0057	61,5	268	108	WRC, Kit Car, Gr. N/A
WRC 1112/10 PE	90 95 0058	61,5	268	108	WRC, Kit Car, Gr. N/A
WRC 1112/10	90 95 0055	78	258	108	WRC, Kit Car, Gr. N/A
WRC 1112/10 PE	90 95 0054	78	258	108	WRC, Kit Car, Gr. N/A
WRC 1279/10	90 95 0044	80	386	130	WRC, Kit Car, Gr. N/A
WRC 1279/10 PE	90 95 0046	80	386	130	WRC, Kit Car, Gr. N/A
WRC 1279/10	90 95 0045	70	370	130	WRC, Kit Car, Gr. N/A
2/1012/10	90 95 0025	76	258	108	FIA Super 2000
2/2790/10	90 95 0034	76	348	130	FIA Super 2000
2/2790/10 PE	90 95 0031	76	348	130	FIA Super 2000

* Two catalytic converters to be mounted parallel.

Exhaust systems for Motorsport

HJS has developed a exhaust system for Mitsubishi EVO VII up to IX including different FIA homologated WRC catalytic converters. The exhaust system is made of stainless steel with an diameter of 63,5 mm. Also we can offer an optimized 63,5 mm Gr. N front pipe for Mitsubishi VII/VIII/IX. Also for far motor vehicle types complete exhaust systems for the motorsport were developed.



90 60 0308

Exhaust Systems

HJS-No.	Car	Exhaust System	Catalytic Converter
90 95 0307	Mitsubishi EVO VII / VIII / IX	Exhaust System Gr.N	WRC 1112/10
90 60 0308	Front Pipe Gr. N Mitsubishi VII / VIII / IX	63,5 mm	-
90 95 0308	Mitsubishi VII / VIII / IX	Exhaust System Gr. N	WRC 1279/10
90 95 0200	Ford Fiesta Cup	Exhaust System Cup	WRC 1112/10
90 95 0211	VW Golf III KitCar	Exhaust System Kit	WRC 1112/10
90 95 0009	Opel Corsa Kit	Exhaust System Kit	WRC 1112/10



The Mitsubishi EVO VIII in action.

Tuning Catalysts

More power, less backpressure HJS has developed a new generation of tuning catalysts on the base of motorsport catalysts. With a 200cps matrix we can guaranty the best results, you will have more power,

Tuning Catalyst, universal

HJS No.	Pipe diameter	length	outer dia.	cubic capacity	information
90 95 0070	70 mm		130	up to 4,0 Liter	to weld
90 95 0080	70 mm	240 mm	121	up to 3,0 Liter	to weld
90 95 0092	60 mm	270 mm	108	up to 2,8 Liter	to weld
90 95 0093	60 mm	275 mm	108	up to 2,8 Liter	with flanges
90 95 0097	50 mm	255 mm	93	up to 1,6 Liter	to weld
90 95 0099	60 mm	173 mm	93	up to 1,6 Liter	to weld

Tuning Catalyst, boldt on

HJS No.	manufacture	typ	ltr./kw	information
Mitsubishi				
90 84 4906	Lancer	Evo 6	2,0	boldt on
90 84 4907	Lancer	Evo 7	2,0	boldt on
90 84 4908	Lancer	Evo 8	2,0	boldt on
Opel				
90 95 0084	Astra/Vectra		2,2/ 136	to weld

Tuning Catalyst with German homologation (TÜV)

HJS No.	manufacture	typ	ltr./kw	motorcode	information
Opel					
90 95 1400	Vectra	2000 16V	2,0/110	C20XE	boldt on
90 95 1400	Calibra	2,0 16V	2,0/110	C20XE	boldt on
90 95 1401	Kadett E	2,0 16V	2,0/110	C20XE	to weld
90 95 1401	Astra	2,0 16V	2,0/110	C20XE	to weld
90 95 0094	Calibra Turbo	2.0	2.0/150	C20LET	boldt on
Honda					
90 95 1547	Civic	Typ R	2,0/147		to weld
Nissan					
90 95 0922	Micra	K11	1,3/74	CG13DE	to weld
VW					
90 95 1100	Golf V	GTi	2,0/147		to weld



Der Mitsubishi EVO VI aus dem Rennstall Gassner

less backpressure and no problem with the MOT or OBD controll.

All HJS Tuning Catalysts based on the experience we have made with our motorsport customers in the last 10 years. HJS is the leading factory for motorsport and tuning catalysts in Europe.



HJS Tuning Catalysts, the new generation of power! No more problems with the MOT test.

Diesel-Particle Filters for Motorsport



In its exhaust regulations 2004, the German Motorsportbund (DMSB) regulates for diesel engined vehicles the usage of a particle filter. HJS developed a **high-performance particle filter** for diesel engined vehicles in the context of the Alfa 147 Cup. This particle filter fulfils all essential Motorsport requirements. For up to date Race-Trucks of the FIA European Truck Racing Championship, HJS offers diesel particle filters as well.

Diesel-Particle Filter

HJS-No.	Homologation	vehicle classification
90 95 2501	MS DPF 1.8/0.87	up to 2000 ccm / 210 PS front-wheel drive
90 95 2502	MS DPF 2.4/1.3	up to 2000 ccm / 280 PS front-wheel drive
90 95 2503	MS DPF 2.5/1.3	up to 3000 ccm / 300 PS rear-wheel drive
94 64 0005	Race-Trucks	
94 60 0253	Fuel Additive F50	1 Liter

Motorsport activities



DTM

The DTM is the racing series with the most demanding technological requirements. All participating manufacturers trust in reliable high-performance catalyst converters by HJS.



World Touring Car Championship

The World Touring Car Championship has been supported by HJS from the very beginning. Our catalytic converter developed especially for this series is also used successfully in the national Championship of Germany, Great Britain and other countries.



Rally World Championship

With eight different manufacturers involved in the Rally World Championships, the competition is fiercer than in any other motor sports series. Only manufacturers offering optimum materials are accepted as suppliers. HJS supplies all competition vehicles in the Rally World Championship with catalytic converter technology. From World Rally cars and kit cars to Group N vehicles, HJS has the right catalytic converter for every type of car.



Universal competition pipes and bends, stainless steel

HJS-No.	Description	length/Ø/wall thickness
90 60 4900	straight pipe	1000 x 45 x 1,5 mm
90 60 4930	30° degree bend	125 x 45 x 1,5 mm
90 60 4945	45° degree bend	135 x 45 x 1,5 mm
90 60 4960	60° degree bend	160 x 45 x 1,5 mm
90 60 4990	90° degree bend	220 x 45 x 1,5 mm
90 60 5000	straight pipe	1000 x 48 x 1,5 mm
90 60 5030	30° degree bend	125 x 48 x 1,5 mm
90 60 5045	45° degree bend	135 x 48 x 1,5 mm
90 50 5060	60° degree bend	160 x 48 x 1,5 mm
90 60 5090	90° degree bend	220 x 48 x 1,5 mm
90 60 5100	straight pipe	1000 x 50 x 1,5 mm
90 60 5130	30° degree bend	120 x 50 x 1,5 mm
90 60 5145	45° degree bend	140 x 50 x 1,5 mm
90 60 5160	60° degree bend	140 x 50 x 1,5 mm
90 60 5190	90° degree bend	220 x 50 x 1,5 mm
90 60 5200	straight pipe	1000 x 55 x 1,5 mm
90 60 5230	30° degree bend	120 x 55 x 1,5 mm
90 60 5245	45° degree bend	160 x 55 x 1,5 mm
90 60 5260	60° degree bend	165 x 55 x 1,5 mm
90 60 5290	90° degree bend	220 x 55 x 1,5 mm
90 60 5300	straight pipe	1000 x 60 x 1,5 mm
90 60 5330	30° degree bend	120 x 60 x 1,5 mm
90 60 5345	45° degree bend	145 x 60 x 1,5 mm
90 60 5360	60° degree bend	160 x 60 x 1,5 mm
90 60 5390	90° degree bend	220 x 60 x 1,5 mm
90 60 5500	straight pipe	1000 x 70 x 1,5 mm
90 60 5530	30° degree bend	120 x 70 x 1,5 mm
90 60 5545	45° degree bend	145 x 70 x 1,5 mm
90 60 5560	60° degree bend	190 x 70 x 1,5 mm
90 60 5590	90° degree bend	240 x 70 x 1,5 mm
90 60 5700	straight pipe	1000 x 76,1 x 1,5 mm
90 60 5730	30° degree bend	130 x 76 x 1,5 mm
90 60 5745	45° degree bend	150 x 76 x 1,5 mm
90 60 5760	60° degree bend	190 x 76 x 1,5 mm
90 60 5790	90° degree bend	250 x 76 x 1,5 mm



Stepped sleeves, stainless steel

HJS-No.	Description	length	steps	Ø	
90 60 5020	stepped sleeve	170 mm	45	48	50 mm
90 60 5120	stepped sleeve	170 mm	48	50	55 mm
90 60 5220	stepped sleeve	170 mm	50	55	60 mm
90 60 5320	stepped sleeve	170 mm	55	60	70 mm
90 60 5520	stepped sleeve	170 mm	60	70	76 mm



Pipe coupling, 3-thick walled, Heavy Duty

HJS-No.	Description	length	Ø
90 60 4910	flexible tube, gas-tight	100 mm	45 mm
90 60 5110	flexible tube, gas-tight	100 mm	50 mm
90 60 5210	flexible tube, gas-tight	105 mm	55 mm
90 60 5310	flexible tube, gas-tight	120 mm	60 mm
90 60 5510	flexible tube, gas-tight	150 mm	70 mm
90 60 5710	flexible tube, gas-tight	150 mm	76 mm

Universal competition exhaust parts: A complete program of universal parts for the self-construction of exhaust systems is offered by the company HJS. With this delivery program, each passionate motor sport fan has now the opportunity of designing his exhaust system individually. It is also extremely helpful for the reconstruction or replacement of original parts which are no longer available. All parts are manufactured in stainless steel. The HJS silencers reduce the noise by absorption through centre perforated tube and high temperature proof fibreglass. Accordingly, there is less gas flow restriction and so back pressure is reduced and engine performance is enhanced.



Universal competition exhaust parts

HJS-No.	Description	Ø/wxl
90 60 3113	connecting adaptor inlet	45 mm
90 60 3114	connecting adaptor outlet	45 mm
90 60 3115	connecting adaptor inlet	50 mm
90 60 3116	connecting adaptor outlet	50 mm
90 60 3118	connecting adaptor inlet	55 mm
90 60 3119	connecting adaptor outlet	55 mm
90 60 3120	connecting adaptor inlet	60 mm
90 60 3121	connecting adaptor outlet	60 mm
90 60 3123	connecting adaptor inlet	70 mm
90 60 3124	connecting adaptor outlet	70 mm
90 60 3125	connecting adaptor inlet	80 mm
90 60 3126	connecting adaptor outlet	80 mm
83 11 2088	packing ring	45/50 mm
83 11 1392	packing ring	55/60 mm
90 60 3138	packing ring	70/80 mm
90 60 3150	thermal protection shield	330 x 330 mm
90 60 3151	thermal protection shield	330 x 500 mm
90 60 3152	thermal protection shield	330 x 660 mm



Universal competition exhaust parts

HJS-No.	Description	Ø/wxl
90 60 3107	three-hole flange	50 mm
90 60 3109	three-hole flange	60 mm
90 60 3110	three-hole flange	80 mm
90 60 0026	straight holder, stainless steel	10 x 220 mm
90 60 0027	straight holder, stainless steel	10 x 250 mm
90 60 7112	rubber mounting Heavy Duty - red	-
83 00 0244	lambda boss plug	M18 x 1,5
90 60 9724	lambda boss	M18 x 1,5
90 60 0512	locking spring, stainless steel	80 x 8 mm



Competition silencers

HJS-No.	Description	Tube Ø	ØxL / hwxwl
90 60 6135	silencer round	50 mm	100 x 400 mm
90 60 6140	silencer round	50 mm	125 x 400 mm
90 60 6245	silencer round	55 mm	125 x 450 mm
90 60 6335	silencer round - stainless steel	60 mm	110 x 350 mm
90 60 6345	silencer round	60 mm	125 x 450 mm
90 60 6343	silencer round - stainless steel	60 mm	150 x 430 mm
90 60 6545	silencer round - stainless steel	70 mm	125 x 450 mm
90 60 6740	silencer round - stainless steel	76 mm	125 x 400 mm
90 60 6745	silencer oval	55 mm	150 x 225 x 450 mm
90 60 6845	silencer oval	60 mm	150 x 225 x 450 mm
90 60 6899	silencer oval - stainless steel	60 mm	120 x 160 x 350 mm