

V4 Leading Clusters
MECHANICAL ENGINEERING
Action Plan

Prepared by:	
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On behalf of the organisation	Czech Machinery Cluster (Narodni strojirensky klastr)
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I. Partner Cluster Organisations		
1.	Leading cluster (abbr.)	Czech Machinery Cluster
	V4LC Manager, contact	Ladislav Mravec, mravec@nskova.cz
	Cluster organisation location, web	Ostrava, Moravian-Silesian Region, www.nskova.cz
2.	Partner cluster (CZ)	Vysočina Precision Machinery Cluster
	Manager, contact	Miroslav Kabelka, miroslav.kabelka@volny.cz
	Cluster organisation location, web	Moravské Budějovice, Vysočina Region, www.kpsv.cz
3.	Partner cluster (CZ)	CREA Hydro&Energy
	Manager, contact	Břetislav Skácel, bret@creacz.com
	Cluster organisation location, web	Brno, South Moravian Region, www.creacz.com
4.	Partner cluster (HU)	Professio Metal and Training Cluster
	Manager, contact	Barta Balázs
	Cluster organisation location, web	Győr, http://professio-gyor.hu/
5.	Partner cluster (HU)	South West Hungarian Engineering Cluster
	Manager, contact	Merza-Szabó Berta, merzaszabo@pbkik.hu
	Cluster organisation location, web	Pécs , Southern Transdanubia, www.ddgk.hu
6.	Partner cluster (PL)	Cluster of mining equipment
	Manager, contact	Małgorzaty Malec, info@komag.eu
	Cluster organisation location, web	Gliwice, Silesian Province, www.klastermg.eu
7.	Partner cluster (SK)	1st Slovak Machinery Cluster
	Manager, contact	Mgr. Pavel Machava, info@1ssk.sk
	Cluster organisation location, web	Banská Bystrica, Central Slovakia, www.1ssk.sk

II. Main specialisations and products		CZ			HU		PL	SK
Industries/Specialisations	Products	P1	P2	P3	P4	P5	P6	P7
power energy machinery	power station equipment	X		x				
mechanical engineering					X	X		X
manufacture of machinery and equipment		X	x	x		x		x
	manufacturing of industrial pumps, valves, tubes and pipe equipment	X						
	promotion, information and education activities in engineering							x
machinery and engineering		X						
	development of new manufacturing technologies		x					x
hydraulic structures, power engineering	machinery equipment for hydropower and hydraulic constructions (turbines, gates, pumps, etc.), design of equipment and constructions			x				
civil engineering				x				
mining machinery	mining equipment						x	
metallurgical industry	equipment and machine design, machine and tool modernization, machinery heat				x			
manufacture of basic metals	metal				x			
	production of a next generation roofing		x					
	training courses for mechanical engineering					x		

Summary of main specialisations and products

Mechanical engineering as one of the most demanding branches of industry is interconnected with many other sectors, which are taking advantage of recent results of research and development.

In the Visegrad region only in the Czech Republic it covers all areas of machinery production:

- Heavy machinery
- Transportation, machine and device production, equipment for industry
- Precise mechanics
- General machinery

But all three others countries developed dynamically their own machinery production

- Slovakia: 39% comes from automotive industry
- Poland: two digit growth in the recent years
- Hungary: support for local agriculture, mining and metallurgy

Innovative products and target countries for export, examples:

Energy, Power engineering	Turkey
Metallurgy	Germany
Steel cylinders	worldwide
Valves, pipe fittings	Russia, Scandinavia
Mining transportation	Ukraine, China, Mexico

III. Plan of common actions		
A	Networking and match-making events	1. Cluster-to-cluster excursions
		2. Continuing communication with the V4Clusters Board
		3. Contribution to the V4Clusters portal – events, projects, achievements
		4. Participation in the national cluster events of the V4
B	Joint promotion and marketing	5. The International Engineering Fair in Brno 2015 – joint exposition
		6. Participation at 2 nd Istanbul Nuclear Power Plants Summit, Turkey, March 19-20, 2015
		7. Participation at 3 rd Turkey MENA Nuclear Industry Congress, Istanbul, April 15-16, 2015
		8. Participation at Ostrava Symposium on Nuclear Power Plant Paks II, Hungary. April 23, 2015
		9. Participation at NSK Seminar on Finish Nuclear Power Plant Hanhikivi-1, Finland, October 19-21, 2015
C	Collaborative projects	10. COS–WP 2014-3-04 - Cluster Excellence Programme
		11. H2020-INNOSUP-2015 - Cluster facilitated projects for new industrial chains
		12. (IVF 2015) – V4ASEAN – Promotion of the V4 machinery sector in the ASEAN countries
		13. (IVF 2015) – Building the value chains for the V4 competitive engineering

Comments on the activities:

Generally, production and commercial responsibility belongs to the management of individual companies.

The role of the cluster in mechanical engineering includes:

- Assistance in establishing of supply chains for technological units
- Organizing purchase alliances
- Support for product innovations (projects, grants, R a D)
- Technical education and selected profession training programs
- Conferences, workshops and seminars reflecting day-to-day and also long term needs and ambitions of the members

Current key factors in mechanical engineering, themes for seminars:

- Energy policy of state, incl. prices and fees
- Company internal efficiency
- Innovations
- Trade and financing of projects, EPC contracts
- Transportation infrastructure (road, railway, waterway network)

IV. Recommendations for the Visegrád policy		
	Identified issues	Recommended solutions
1	Missing support of the cluster development and inter-cluster cooperation	To extend the IVF programme of the specific priorities bound to clusters development and cluster internationalisation support <ul style="list-style-type: none"> - learning (value chain assessment) - marketing (joint promotional publication) - joint internationalization strategy - participation in sectoral events
2	Low interlinking of the industrial strengths and external policies of the Visegrád Group	To incorporate the V4 machinery sector in the Visegrád external and business policy agenda including the participation of the cluster leaders in the official events in target countries.

Conclusions:

Common cluster issues and interests within V4 countries:

- Analysis, discussions and harmonized approach to current key factors
- Partnership in joint commercial, technological and educational projects
- Common participation in fair trades
- Specialized exhibitions
- Exchange program for business missions

Common needs possibly covered by International Visegrad Fund

- Technical education, exchange programs within mechanical engineering
- Exchange programs for trade representatives
- Energy prices and fees, removal of discrimination among EU companies
- Transportation: roads, railways, waterways in the region