FLUID POWER CHALLENGE DÉFI ÉNERGIE DES FLUIDES

National Challenge Rubric

(short version)

	Criteria	Points
Portfolio Rubric *Total possible points: 50*	• Quality of portfolio's presentation including title and index pages	0 – 5
	• A detailed outline of each team member's participation in the production of the portfolio and planned production of the device	0 – 5
	• At least three illustrations of the initial design concepts of a possible device	0 – 5
	• List of materials used to build a prototype from the Workshop Kit	0 – 5
	• Description of the use of principles of structural strength and stability	0 – 5
	• Rationale used do decide on the type of fluid power used and where to place the piston-syringes	0 – 5
	• An isometric drawing of the portion of the prototype used to grab the object	0 – 5
	• An orthographic drawing showing dimensions and construction notes	0 – 5
	• A list of alternative materials that would have been useful with reasons why they would have been so	0 – 5
	• Evaluation of a prototype including conclusions from making it	0 – 5
Teamwork & Work Habits *Total possible points: 10*	• Members of the team work independently and co-operatively in an organized way	0 – 5
	• Members of the team demonstrate safe working practices	0 – 5
Device Design, Construction & Operation *Total possible points: 10 + placement points*	• The device uses materials effectively and is well constructed with parts securely attached	0 – 5
	• The device itself operates efficiently and is operated in an organized way	0 – 5
	• Object placement points accumulated in designated time period	
Interview Questions *Total possible points: 20*	• See detailed *Challenge Rubric* for wording of questions	0 – 20

Canadian Fluid Power Association
Association canadienne d'énergie des fluides