# Survey on HD Category Development Process

ASTM HDEOCP Meeting June 19, 2007

#### **Overview**

- HDEOCP membership & other stakeholders asked to provide feedback on HD category development & deployment
  - Issues specific to PC-10
  - General process
- Fourteen responses received
  - ✤ ACC -- 4
  - API -- 4
  - ✤ EMA -- 6
- Preliminary recommendation to assign working groups to address 6 issues from the survey
  - The highest priority issue for each trade association -- ACC, API, & EMA
  - Three issues with the highest overall level of interest

Rating Summary			ACC							A	P		EMA							
		Avg. By Group	Afton	Infineum	Lubrizol	RohMax	Grp. Avg.	ВР	Chevron	ExxonMobil	Shell	Grp. Avg.	Caterpillar	Cummins	EMA	John Deere	Navistar	Volvo	Grp. Avg.	
category and	advantages of more closely aligning API C OEM specs in future HD categories? How do the utilization of a new HD category?	2.08	2	1	5	3	2.75	1	1	1	1	1	3	1	3	3	2	3	2.5	
program for	advantages of expanding the API AMAP API C category oils? Do you feel the API AMAP replace the OEM spec audit process?	2.64	3	4	2	3	3	3	2	1	3	2.25	3	2	4	3	3	1	2.667	
3 How can we minimum of	extend the life of future HD categories to a 5 years?	2.28	3	1	1	3	2	3	1	3	3	2.5	2	3	2	2	2	3	2.333	
	improve the timing of reaching consensus on relopment issues in future HD categories?	1.94	2	3	1	2	2	2	1	2	3	2	1	2	3	1	3	1	1.833	
5 How can we future HD ca	plan as an Industry for the successful roll out of tegories?	1.92	1	4	1	3	2.25	2	1	2	1	1.5	1	1	3	3	3	1	2	
	nprove the communications through out the development process in future HD categories?	2.67	3	4	5	3	3.75	2	2	2	3	2.25	1	3	2	2	2	2	2	
	nprove the estimate of timing at all stages of the development process in future HD categories?	2.22	3	3	1	3	2.5	2	1	2	1	1.5	2	3	3	3	3	2	2.667	
-	enerate the data needed in a timely way to to new tests so we have fewer active tests?	2.08	1	1	1	3	1.5	2	2	1	4	2.25	1	2	4	3	3	2	2.5	
-	options for greater industry participation in ench test development? Is the Seq VID model an	2.91	4	3	5	4	4	2	3	2		2.333	1	2	2	3	4		2.4	
	ter way to generate BOI/VGRA and old test at at the end of the test development cycle?	2.17	1	1	1	3	1.5	4	1	1		2	3	3	4	2	4	2	3	
11 How do we b are not yet c	etter determine industry needs for engines that ommercial?	2.03	2	2	1	3	2	1	3	2	1	1.75	1	2	5	2	2	2	2.333	
12 Should we c of a global s	onsider combining future API HD specs as part pec?	2.36	1	5	5	3	3.5	5	1	2	1	2.25	1	2	1	1	1	2	1.333	

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Ranked Ratings		ACC							AF	ין		EMA								
	namou natingo	Avg. By Group	Afton	Infineum	Lubrizol	RohMax	Grp. Avg.	ВР	Chevron	ExxonMobil	Shell	Grp. Avg.	Caterpillar	Cummins	EMA	John Deere	Navistar	Volvo	Grp. Avg.	
	How can we plan as an Industry for the successful roll out of future HD categories?	1.92	1	4	1	3	2.25	2	1	2	1	1.5	1	1	3	3	3	1	2	
4	How can we improve the timing of reaching consensus on key spec development issues in future HD categories?	1.94	2	3	1	2	2	2	1	2	3	2	1	2	3	1	3	1	1.833	
	How do we better determine industry needs for engines that are not yet commercial?	2.03	2	2	1	3	2	1	3	2	1	1.75	1	2	5	2	2	2	2.333	
1	What are the advantages of more closely aligning API C category and OEM specs in future HD categories? How do we maximize the utilization of a new HD category?	2.08	2	1	5	3	2.75	1	1	1	1	1	3	1	3	3	2	3	2.5	
8	How do we generate the data needed in a timely way to correlate old to new tests so we have fewer active tests?	2.08	1	1	1	3	1.5	2	2	1	4	2.25	1	2	4	3	3	2	2.5	
10	Is there a better way to generate BOI/VGRA and old test correlation data at the end of the test development cycle?	2.17	1	1	1	3	1.5	4	1	1		2	3	3	4	2	4	2	3	
7	How do we improve the estimate of timing at all stages of the specification development process in future HD categories?	2.22	3	3	1	3	2.5	2	1	2	1	1.5	2	3	3	3	3	2	2.667	
3	How can we extend the life of future HD categories to a minimum of 5 years?	2.28	3	1	1	3	2	3	1	3	3	2.5	2	3	2	2	2	3	2.333	
12	Should we consider combining future API HD specs as part of a global spec?	2.36	1	5	5	3	3.5	5	1	2	1	2.25	1	2	1	1	1	2	1.333	
	What are the advantages of expanding the API AMAP program for API C category oils? Do you feel the API AMAP program can replace the OEM spec audit process?	2.64	3	4	2	3	3	3	2	1	3	2.25	3	2	4	3	3	1	2.667	
6	How do we improve the communications through out the specification development process in future HD categories?	2.67	3	4	5	3	3.75	2	2	2	3	2.25	1	3	2	2	2	2	2	
	What are the options for greater industry participation in engine and bench test development? Is the Seq VID model an option?	2.91	4	3	5	4	4	2	3	2		2.333	1	2	2	3	4		2.4	

Top Priorities			ACC						AF	וי		ЕМА							
ACC top priority	Avg. By Group	Afton	Infineum	Lubrizol	RohMax	Grp. Avg.	BP	Chevron	ExxonMobil	Shell	Grp. Avg.	Caterpillar	Cummins	EMA	John Deere	Navistar	Volvo	Grp. Avg.	
8 How do we generate the data needed in a timely way to correlate old to new tests so we have fewer active tests?	2.08	1	1	1	3	1.5	2	2	1	4	2.25	1	2	4	3	3	2	2.5	
API top priority																			
1 What are the advantages of more closely aligning API C category and OEM specs in future HD categories? How do we maximize the utilization of a new HD category?	2.08	2	1	5	3	2.75	1	1	1	1	1	3	1	3	3	2	3	2.5	
EMA top priority		-					_					_							
12 Should we consider combining future API HD specs as part of a global spec?	2.36	1	5	5	3	3.5	5	1	2	1	2.25	1	2	1	1	1	2	1.333	
5 How can we plan as an Industry for the successful roll out of future HD categories?	1.92	1	4	1	3	2.25	2	1	2	1	1.5	1	1	3	3	3	1	2	
4 How can we improve the timing of reaching consensus on key spec development issues in future HD categories?	1.94	2	3	1	2	2	2	1	2	3	2	1	2	3	1	3	1	1.833	
11 How do we better determine industry needs for engines that are not yet commercial?	2.03	2	2	1	3	2	1	3	2	1	1.75	1	2	5	2	2	2	2.333	

#### Discussion

#### Next steps