## **KYB TECHNICAL REVIEW**

## No. 50 APR. 2015

## **CONTENTS**

Foreword		
Toward the Development of a Fluid Power System	Toshiharu Kagawa	1
Greetings		
Commemorating the 50th Edition of KYB Technical Review	Tadahiko Ozawa	3
Greetings	Masao Usui	4
Essay		
Technology Transfer	Keisuke Makino	5
Special Articles		
Technological Development Targeted by KYB	Keisuke Saito	10
Electronic Device Product Development and Future Outlook in a KYB gr	_	12
The Shiro Kayaba Award: Forty Years of Technical and Commercial Prog		
	Tsutomu Yoshimoto	19
	Tetsurou Shimizu	
	Yoshihiro Ogawa	
	Yoshiharu Miya	
Monozukuri at the KYB Group	Minoru Katamine	30
Technology Explanation		
Noise-Reduction Technologies in KYB	Shinji Yakabe	37
	Kazunari Suzuki	
Essay		
Dispatches from the Czech Republic	Kouichi Kudou	45
Product Introduction Development of the Engine Control Unit for High-Performance Electric Po	war Stooring	
Development of the Engine Control Onit for Trigh-1 errormance Electric 10	Kouki Nagae	49
Glossary	Rouki Nagae	43
EMC and EMI	Daisuke Matsumoto	53
Product Introduction	Daisuke Watsumoto	00
Development of a High-efficiency Electric Power Steering Motor	Yoshiteru Kurokawa	54
Sales Promotion Strategy for Frequency-dependent Shock Absorbers Use		01
back fromotion bracegy for frequency dependent brook from solo	Yuusuke Furuta	58
	Takao Murata	00
	Yoshihiro Shibata	
	Hiroaki Mantani	
Development of the Front Fork (AOSII) for Super Sport Motorcycles	Takeshi Tomiuga	64
Development of an Idling Stop System for Mixer Trucks	Keisuke Kimoto	68
Development of an funng stop system for whiter fracks	Yoshimitsu Takahashi	00
Three-axis Earthquake Simulator	Hisashi Arisaka	72
Development of Cylinders with Hollow Piston Rod Tubing	Sadayuki Kamikura	76
Small Axial Piston Pump Unit	Yoshikatsu Tsujii	80
Cartridge Valve Module (CVM) and Small Control Valve (CVS)	Nobutestu Yamamura	84
Cartriage valve module (CVM) and Sinan Control valve (CVS)		04
	Ryota Tamagawa	

Technology Introduction			
Development of an Electric Mechanical Actuator for Aircraft with a Cylindrical Linear Motor			
	Kousuke Sato	88	
Glossary			
Cogging	Yoshihiro Ogawa	94	
Technology Introduction			
Changes in Cylinders for Hydraulic Excavators	Yasuhito Takai	95	
Configuration of a Machining Line for Control Valve Housings	Takaaki Kasuda	101	
Implementation of Work Simulations for Achieving Results as Planned	Sunao Kishimoto	105	
Building the Gifu East Factory	Yasuo Nishimori	109	
Toward Adopting ISO 26262 in EPS development	Ikuhito Ishizue	113	
Development of a Frame for a Large (300-t) Piston Rod Straightener	Kentaro Iuchi	117	
Configuration of Buildup the ECU Production Line for EPS	Shuujirou Osada	122	
	Kazuyuki Katayanagi		
Essay			
Dispatches from France and Germany, Then and Now: French Roundabouts, German Autobahns			
	Yoshihito Kamimura	126	
Related Patents		132	

## **Editors Script**

(Cover Photograph: The Appearance of the Experiment Building of KYB Developmental Experiment Center, The Experiment Building, Radio Wave Dark Room and KYB Logo (Anniversary and Statement))