

Integrated Sealing Systems Division

Integrated Sealing System Division Launches 12AS Cap with Hydraulic Filter Division

Through our continued efforts to bring integrated sealing products to Parker, ISS will be launching our second Hydraulic Filter Division (HFD) filter cap in the coming month. The ISS Engineering team worked together with HFD engineering to develop a filter cap (see Fig 3) that meets the 500 psi system pressures on three sealing surfaces.

The 12AS cap like its big brother the 50AS utilizes an outer plastic edge (see fig 1) for cap position and strength allowing the upper and lower over-molded seals to meet system sealing requirements. The inner rubber ring (see figure 2) provides a reliable seal for the outlet tube.

ISS utilized our rubber-to-plastic carrier technology (reference ISS bulletin ISS 5804) to meet the challenges of the cap design. ISS was able to minimize tooling costs through design to meet FKM and Nitrile requirements.

Page two of the newsletter further details this product in reference story format. For more information on this application contact Berndt Luchs in Lynchburg.



Fig 3



Fig 1: Plastic carrier acts as integrated back-up ring to allow seal to meet 500 psi system requirements



Fig 2: Mechanically locked FKM or Nitrile seal

Integrated Sealing Systems TSM of the Month

The Integrated Sealing Systems would like to recognize **John Creed as the ISS TSM** for the month of July. John was instrumental in obtaining several new platforms as well as winning back a lost opportunity totaling over \$800k during the month. Thanks again for all your hard work John!

Thanks again to all of the field sales for the efforts over this past year and we look forward to converting more of the Red Zone projects into new business awards in the near future.

Reference Story Template	
Job Title/Industry	Product Engineering / Hydraulic Filtration
Critical Business Issue	Spin-on filter disposals result in excessive oil waste and landfill issues. Parker’s Hydraulic Filter Division was looking to develop an innovative alternative to the traditional, disposable spin-on can that would reduce overall waste.
Reason(s)	Each year more than 500 million spin-on cans wind up in North American landfills. This yields 250,000 tons of scrap metal and 30 million gallons of discarded residual waste oil. These disposable costs add up both for the ones discarding the spin-on filter and for the environment in general.
Capability(s)	Parker Hydraulic Filter Division was looking for assistance in designing and manufacturing an over-molded filter cap that would be able to provide three different sealing points capable of withstanding the 500-psi system pressures. Parker HFD was also looking for a design that met their patent requirements and that would have no rubber flash on the center tube ID
We Provided ...	Design support along with finite element analyses in support of the filter cap design and validation testing of the assembly that helped enable Parker HFD to meet the application requirements while being able to meet patent requirements.
Result	Parker’s Hydraulic Filter Division has been able to release the product to market with all specified product features and patent protection. More information can be found on their Coreless Spin-On Filters on the Parker web site.

Integrated Sealing System Division Product School Scheduled for January 20 through 22, 2009

The upcoming Integrated Product school **classes are beginning to fill up**...make sure to get the seats you need for yourselves and your customers reserved today!

Call Joan Cocke for reservations at 434- 846-6541

Integrated Sealing Systems Division product school provides attendees with a toolbox of knowledge in our manufacturing capabilities, engineering design concepts and selling techniques to improve your ability to sell with confidence and increase growth.

Integrated Sealing Systems - Engineering News

Integrated Sealing Systems Division Launches Throttle Body Seal with ParkerSlick Coating

Integrated Sealing Systems utilized the ParkerSlick coating developed by Parker O-Ring Division to meet color identification needs required by our customer on a black HNBR throttle body seal.



ParkerSlick is an external seal coating that provides excellent adhesion and friction properties over PTFE coatings. ParkerSlick is dry to the touch, does not rub off easily and unlike PTFE, does not leave any visible residue behind.

For more information on this application contact Nigel Goulding in Lynchburg or see O-Ring Division technical bulletin ORD 5751

Integrated Sealing System Division adds contamination testing to lab capabilities

Parker Integrated Sealing Systems Division now has the ability to perform contamination testing on products. Testing was established to meet Ford engineering specification ESBC3P-7W092-BA. A non-destructive test, this allows Parker ISS to determine the exact weight of contaminants found on a part after it has passed through the entire production process.



The 10 micron filters used have the ability to capture a variety of particulate matter including, dust, fibers, metal shavings, etc..

For this testing procedure, parts are sampled directly from those ready for shipment to customers. Parts are individually washed with solvent, which is then collected and filtered. After thoroughly drying the filter, it is weighed to determine actual contaminate weight.

Contamination testing capability will allow Parker ISS to better control its production processes. When contamination is detected to be above set reaction and specification limits, production procedures can be evaluated to determine and reduce the exact sources of contamination. This will enable Parker ISS to ship better, cleaner products to its customers.

Form more information on this procedure contact Jacki Stevens in Lynchburg

ISS Technical Bulletins *(available through catalog services & POL)*

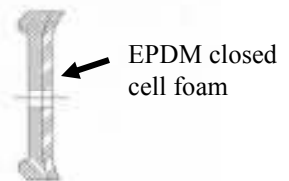
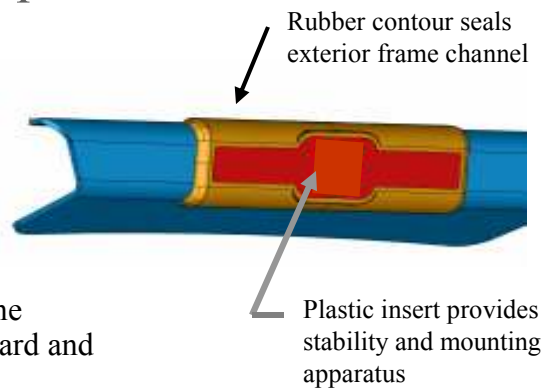
Lip Seals	# ISS 5807	Carrier Gaskets	# ISS 5804
Research & Development	# ISS 5806	Bonded Pistons	# ISS 5803
Material Selection	# ISS 5805	ChemCast Piston Seals	# ISS 5801
Drop-in-Place Seals	# ISS 5802	Over-molded Filters	# ISS 5808

Cost challenges Overcome with Design Creativity on Integrated Channel Assembly Cap

Integrated Seal Systems creative capabilities are being utilized to meet the technical and cost constraints that our customers put in front of us every day. In the June issue of the ISS newsletter we profiled the exterior channel seal shown in the upper right hand model.

When we learned that the quoted price did not meet the customer cost targets we went back to the drawing board and quickly came up

with a plastic cover with an closed cell EPDM foam backing (model bottom) that will meet the customer needs in design and cost. For technical information on this application contact Mark Lanham at 434-522-2563



ISS Associate News

Justin Nissley has been promoted to the position of **ISS Business Unit Manager for our Matamoros, MX facility.**

Justin began his career at Parker in December 2004, as a Manufacturing Engineer in the O-Ring Division and progressed through various operational positions. Justin most recently was a Value Stream manager for the O-Ring Division in the same Matamoros facility where he will transition in to the Business Unit role for the ISS Division.

Justin has a Bachelor of Science degree in Mechanical Engineering from the University of Kentucky.

