ExxonMobil’s PxMax™ process is the industry benchmark for selective toluene disproportionation (STDP). The technology, based on the ex-situ selectivated EM-2300 catalyst, offers unmatched paraxylene selectivity and product yields, as well as exceptionally long and stable cycles. ExxonMobil’s Dividing-Wall Column (DWC) technology and Crystallization recovery technology are also available for licensing in combination with the PxMax process. Most STDP units worldwide currently operate the PxMax process, with catalyst cycles exceeding 13 years in multiple locations.

**Advantages:***

**Improved process performance**
- Ultra-high PX selectivity which improves over the cycle
- High weight hourly space velocity
- Higher total xylenes yield
- Superior xylenes/benzene ratio
- Benzene product with greater than 99.9% purity
- Very low H2 consumption
- Lower operating cost

**Extremely long catalyst cycles – no in-situ selectivation needed**

**Lower investment costs**
- Reduced size of reactor and PX recovery unit
- Lower metallurgy cost
The following simplified flowschema shows the PxMx℠ process.

Figure 1: Process Flow Diagram