

**Berghaus Pipe Organ Builders,  
Bellwood, Illinois  
St. Jerome Catholic Parish,  
Oconomowoc, Wisconsin**

Berghaus Pipe Organ Builders has built a new pipe organ for the people of St. Jerome Catholic Parish in Oconomowoc, Wisconsin. Opus 226 contains 53 ranks, 42 stops, and 3,019 pipes. The project was made possible by the generosity of the people of St. Jerome Catholic Parish, as well as other benefactors and contributors from the community.

Plans to relocate St. Jerome Parish began in the fall of 1997 as it became clear that the parish was expanding beyond the physical limitations of their historic downtown church. By August 1998, the parish had purchased 37 acres of land and begun planning for a parish-wide campaign. The school was constructed first, and was dedicated on September 11, 2004. A second parish-wide campaign began in January 2005, resulting in the dedication of the church on November 15, 2008. The new 1,000-seat nave nearly tripled the previous sanctuary's capacity of 350, and provided the parish with a bright, modern worship space with a more favorable acoustical signature.

From the onset of the project, it was clear the existing 1918 Kimball organ would need to be incorporated into the new instrument to minimize new pipe costs. The two-manual, 15-rank organ, located in the center of the rear balcony, was entirely installed in a case against the rear wall. Despite additions in the early 1980s, the organ was of typical early twentieth-century liturgical design. The stoplist incorporated six stops at 8' pitch, two stops at 4', and a 16' Bourdon in the Pedal. Added ranks included a 2 1/2' Quinte, 2' Octave, and Mixture IV in the Great. Original voicing and pressures were retained on the Kimball pipes at the time when the organ was augmented, which did little to bridge the gap between the old and new pipes. Thankfully, the new pipes were under-voiced, which would give Berghaus ample latitude in tonal finishing. Additionally, the bottom octave of the 4' Flute d'Amour was abandoned, and the pipes were shifted down to create a 2' Flute in the Swell.

In the new church, the organ was planned to occupy both ends of the nave. Great, Swell, and Pedal divisions would be entirely new, and located in the rear gallery. The Antiphonal division would be installed in one chamber, above and to the left side of the chancel. We chose not to divide the resources of the Kimball, but rather use them to create the new Antiphonal division. Furthermore, the Antiphonal chamber would be situated at the same height as the gallery organ to promote tuning stability.

Special consideration was taken in planning pipe scales for the gallery instrument, with the intent that the Antiphonal organ would not be a dark distraction to the new organ. Our present tonal philosophy reflects an eclectic approach, which is conducive to blending early twentieth-century voicing styles. We took our cues from the best elements of late nineteenth-century English organs, tempered somewhat by elements of romantic French and early romantic German organbuilding. All flue scales in the gallery are variable, changing throughout the compass for acoustic and practical reasons. The result is an instrument that, while separated by distance, successfully works as a whole tonal concept, which in turn is able to effectively provide the combinations necessary for liturgical music and beyond. Differing foundation and flute resources are available for cantorial accompaniment, projecting close to the lectern. The Antiphonal also contains the softest string sounds for tonal effects in anthems and voluntaries. When the full resources of the Antiphonal are coupled to the gallery organ, the Antiphonal "carries" the sound of the gallery organ forward down the nave, while at the same time seamlessly blending with the gallery without detracting from its timbre.



Berghaus Opus 225, St. Jerome Catholic Church, Oconomowoc, Wisconsin



Façade with Trompette en Chamade



Console

**Great**

The Great division consists of 15 stops, 16 ranks, and is divided between one large slider chest and one electro-pneumatic chest. The division is located directly above the Swell enclosure, and is based on the 8' Principal, which is located primarily in the façade and constructed of 75% tin, with spotted metal

in the treble. The 8' Principal is scaled near *Normalmensur* plus two, which on 80mm wind pressure fills the nave with a warm yet gentle tone. It is voiced full in the bass, and has clarity in the treble to reinforce the melody line. The Principal chorus is complete through a four-rank mixture, and includes mutations that are meant to reinforce the plenum. Flues

are primarily in spotted metal with the intent to add warmth to the overall tone, yet allow for brightness in finishing.

Additional 8' stops (Flute Harmonique, Bourdon, Gemshorn, and Gemshorn Celeste t.c.) complete the standard *fonds d'orgue*, as well as add the unique flexibility of a third, unenclosed celeste. Tonal considerations were made to allow the scaling of this hybrid pair to be generous, yet with a low cut-up to provide clarity of tone. The 8' Trumpet is designed with German shallots to provide a blending quality, which is meant to enhance the plenum. By contrast, the horizontal Trompette en Chamade, which is mounted on the front of the case, is scaled and voiced to blend with full organ registration, and can be used as a solo stop for processionals and fanfares. Both reeds are voiced on 100mm pressure.

**Swell**

The Swell division consists of 17 stops, 15 ranks, and is also divided between one large slider and one electro-pneumatic chest. The division is based on the 8' Diapason of spotted metal, which provides foundation to a complete principal chorus through the Plein Jeu. The scale of the Swell Diapason is three steps smaller and completely different in tone than the Great Principal. The Swell contains a wide variety of stops, ranging from French-style strings to a liquid 8' Rohrflöte, which is unified at 16' and made of wood. Mutations are broadly scaled to provide for a rich *Cornet décomposée*. We elected to use English construction for the 8' Trompette in the Swell in order to provide a contrast in tone to the Great Trumpet.

**Antiphonal**

Restoration of the Kimball pipework involved restoration of each pipe in one form or another. While minor repair and remedial voicing work was necessary, the general pipe-making was excellent. Few pipes had been physically altered in previous rebuild efforts, which allowed for maximum flexibility in finishing. We replaced the leather on the stoppers of all wood pipes, and in the spirit of the original Kimball, we provided twelve bass pipes to the Flute d'Amour, and returned it to 4' pitch. We also replaced the low twelve pipes of the Open Diapason, which replaced the badly damaged pipes





Antiphonal organ in chancel



Side of console



Manuals and right stop jamb



Façade and casework

of the original façade. All spotted metal pipes were dunked in a restorative solution, and fitted with new stainless steel sleeves. Finally, an 8’ Vox Humana was provided by Dr. Lee Erickson, friend to the project.

The 8’ Open Diapason of this division provides the organist with yet another Diapason tone. Made from a high-lead alloy, these pipes provide the tone one would expect from a Diapason of this vintage. The pipes are cut dead-length and scrolled. Undoubtedly they would have been originally over-length and slotted. Deep nicks in the languid and lower lip allow for open-toe voicing, which allows this stop to truly enhance the gallery instrument.

Pedal

Consisting of 19 stops, 8 ranks, the Pedal provides a solid foundation to this full instrument. Through calculated borrowing and tonal finishing, this division provides an ample variety of timbres and volumes. The 16’ Principal in the Pedal division (façade) is made from a combination of zinc and 70% tin pipes, and is finished with a silver-tone patina. The Pedal is further supported by an impressive unit 32’ Kontra Posaune, which is voiced full in order to provide an equal blend of harmonics and fundamental. We used tin-faced German shallots throughout the compass of this reed, which provides unique overtones required to enhance the pedal plenum, particularly when considering this stop will be used in part in cantus firmus.

Chests and wind system

Flue pipes of the Great, Swell and Antiphonal sit on Berghaus slider and pallet chests. Reeds and offset chests are electro-pneumatic action. The entire organ is supported by an interior steel structure, which provides stability while allowing unimpeded access to interior parts of the mechanism. Wind to the pipes is supplied by two blowers—one blower for the gallery organ, and one for the Antiphonal. Our wind system provides absolutely steady wind through a balance of schwimmers and reservoirs. Wooden wind conductors help eradicate turbulence and are effective in eliminating noise. Slider chest wind pressures are 80 and 75mm, while reeds and Pedal are on 100mm.

The gallery organ case and organ console are constructed of maple, and are designed to incorporate architectural elements found throughout the worship space. Keyboards are in bone and rosewood, with African Kewazinga Bubinga stop jambs and coupler rail.

The construction of the organ at St. Jerome Parish was achieved through the dedication and teamwork of the entire Berghaus organization, which extends its sincerest gratitude to the people of St. Jerome Parish for enabling us to contribute to the life of their parish:

- President: Brian Berghaus
- Director of sales and marketing: David McCleary
- Tonal design: Jonathan Oblander, tonal designer; Kelly Monette, head tonal finisher
- Reed specialist: Steven Hoover
- Structural and visual design: Steven Protzman
- Shop foreman: Jeff Hubbard
- Office manager: Jean O’Brien
- Service coordinator: Joseph Poland
- Construction/assembly/installation: Stan Bujak, Chris Czopek, Steve Drexler, Jeff Hubbard, Trevor Kahlbaugh, Kurt Linstead, Kelly Monette, David Mueller, Jonathan Oblander, Joseph Poland, Daniel Roberts, Tim Roney, Paul Serresseque, Ron Skibbe, Jordan Smoots, Paul Szymkowski, Mark Ber, Randy Watkins.

In addition, Berghaus Pipe Organ Builders gratefully acknowledges the invaluable assistance of Scott R. Riedel & Associates, Ltd. in the project, as well as the expertise and leadership of Fr. John Yockey, pastor, and Tom Koester, past organist of St. Jerome Parish.

—Kelly Monette & Jonathan Oblander  
Berghaus Pipe Organ Builders

Berghaus Pipe Organ Builders, Inc.,  
Opus 225  
St. Jerome Catholic Church,  
Oconomowoc, Wisconsin

42 registers, 53 ranks, 65 stops

Key and stop action: electric slider  
and electro-pneumatic  
Manual compass: C–c 61 notes  
Pedal compass: C–g 32 notes

GREAT – Unenclosed – Manual I		
16’	Contra Gemshorn (ext)	12 pipes
8’	Principal	61 pipes
8’	Flûte Harmonique	49 pipes
(1–12 Bourdon, harmonic at f30)		
8’	Bourdon	61 pipes
8’	Gemshorn	61 pipes
8’	Gemshorn Celeste TC	49 pipes
4’	Octave	61 pipes
4’	Flauto Traverso (wood)	61 pipes
2½’	Quinte	61 pipes
2’	Super Octave	61 pipes
1½’	Mixture IV (19-22-26-29)	244 pipes
8’	Trumpet	61 pipes
8’	Cromorne	61 pipes
Tremulant		
16’	Trompette en Chamade TC	
8’	Trompette en Chamade	61 pipes
Zimbelstern (tuned handbells)		

SWELL – Enclosed – Manual II		
16’	Rohrbourdon (ext 8’ Rohrfl)	12 pipes
8’	Diapason	61 pipes
8’	Rohrflöte	61 pipes
8’	Salicional	61 pipes
8’	Voix Celeste	56 pipes
4’	Prestant	61 pipes
4’	Koppelflöte	61 pipes
2½’	Nasard	61 pipes
2’	Flageolet	61 pipes
1½’	Tierce	61 pipes
2’	Plein Jeu IV (15-19-22-26)	244 pipes
16’	Fagotto	12 pipes
8’	Trompette	61 pipes
8’	Oboe	61 pipes
4’	Clairon (ext 8’ Trompette)	12 pipes
Tremulant		
16’	Trompette en Chamade (TC Great)	
8’	Trompette en Chamade (Great)	

ANTIPHONAL – Enclosed – Manual III		
8’	Open Diapason*	61 pipes
(partial new for exposed façade)		
8’	Melodia*	61 pipes
8’	Viola da Gamba*	61 pipes
8’	Stopped Diapason*	61 pipes
8’	Dulciana*	61 pipes
8’	Unda Maris*	49 pipes
4’	Principal*	61 pipes
4’	Stopped Flute* (partial new)	61 pipes
2’	Fifteenth*	61 pipes
IV	Full Mixture*	244 pipes
8’	Vox Humana*	61 pipes
Tremulant		
16’	Trompette en Chamade (TC Great)	
8’	Trompette en Chamade (Great)	
4’	Trompette en Chamade (Great)	
Chimes (brass)		
* existing pipes		

PEDAL – Unenclosed		
32’	Untersatz (resultant, 16’ Principal / 16’ Subbass)	
16’	Principal	32 pipes
16’	Subbass	32 pipes
16’	Contra Gemshorn (Great)	
16’	Rohrbourdon (Swell)	
8’	Octave (ext 16’ Principal)	12 pipes
8’	Holzgedeckt (ext 16’ Subbass)	12 pipes
8’	Gemshorn (Great)	
8’	Rohrflöte (Swell)	
4’	Choralbass	32 pipes
2½’	Mixture III (19-22-26)	96 pipes
32’	Kontra Posaune	12 pipes
16’	Posaune	32 pipes
16’	Fagotto (Swell)	
8’	Trompete (ext 16’ Posaune)	12 pipes
8’	Oboe (Swell)	
4’	Klarine (ext 16’ Posaune)	12 pipes
8’	Trompette en Chamade (Great)	
16’	Pedal Bourdon* (ANT)	32 pipes

Summary				
Division	Registers	Stops	Ranks	Pipes
Great	13	15	16	964
Swell	12	17	15	946
Antiphonal	11	14	14	842
Pedal	6	19	8	320
Total	42	65	53	3072

Photo credit: David McCleary

Berghaus Pipe Organ Builders  
2151 Madison St.  
Bellwood, IL 60104  
708/544-4052  
www.berghausorgan.com